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MEMORANDUM OF UNDERSTANDING FOR IMPLEMENTATION OF  
AN ALTERNATIVE WATER RESOURCES MANAGEMENT PROGRAM

Among the

SANTA CLARITA VALLEY SANITATION DISTRICT OF LOS ANGELES  
COUNTY

UPPER BASIN WATER PURVEYORS

UNITED WATER CONSERVATION DISTRICT, AND

VENTURA COUNTY AGRICULTURAL WATER QUALITY COALITION

October 2008

A.

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MEMORANDUM OF UNDERSTANDING FOR THE IMPLEMENTATION OF  
AN ALTERNATIVE WATER RESOURCES MANAGEMENT PROGRAM

This Memorandum of Understanding for the Implementation of an Alternative Water  
Resources

Management Program ("MOU") is entered into effective & later, 2008, by and among  
CASTAIC LAKE WATER AGENCY ("CLWA"), CLWA, SANTA CLARITA  
WATER DIVISION

("scwD"), VALENCIA WATER COMPANY ("VWC"), NEWHALL COUNTY  
WATER DISTRICT

("NCWD"), and LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 36

("LACWD"), which

are collectively referred to as the "UPPER BASIN WATER PURVEYORS ("UBWPS"),  
the SANTA

CLARITA VALLEY SANITATION DISTRICT OF LOS ANGELES COUNTY  
("SCVSD"), the

UNITED WATER CONSERVATION DISTRICT ("UWCD"), and the VENTURA  
COUNTY

AGRICULTURAL WATER QUALITY COALITION ("VCAWQC"), individually  
referred to as a

"Party" and collectively as the "Parties."

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RECITALS

A total maximum daily load (TMDL) for chloride in the Upper Santa Clara River  
(Reaches 5

and 6) was adopted by the California Regional Water Quality Control Board - Los  
Angeles

Region ("Regional Board") and became effective on May 5, 2005. The TMDL  
established waste

load allocations of 100 mg/L for the SCVSD's Saugus and Valencia Water Reclamation  
Plants

(WRPs). The TMDL implementation schedule allows for several special studies to  
determine

whether existing water quality objectives and waste-load allocations for chloride can be revised,  
and provides for an 11-year schedule to attain compliance with the final water quality objectives  
and waste-load allocations for chloride.  
The conventional approach to achieving compliance with the existing 100 mg/l- water quality  
objective and waste-load allocations for chloride would be through constructing  
desalination  
facilities at the SCVSD's Saugus and Valencia WRPs and a 43-mile brine line through  
the Santa  
Clara River Watershed to an ocean outfall off the Ventura coast. The Parties have  
collaboratively  
developed an alternative approach to water resources management that will achieve  
TMDL  
compliance, which is set forth in an exhibit to this MOU (Exhibit I) and entitled "the  
Alternative  
Water Resources Management Program" ("the AWRM Program"). This program uses a  
basin  
water supply management approach to achieve the final water quality objectives and  
waste load  
allocation for chloride determined through the TMDL collaborative process. The AWRM  
Program, in comparison with the conventional approach, would have economic, public  
acceptance, feasibility, timing, environmental quality, and water supply benefits.  
The Parties recognize that the AWRM Program provides multiple benefits for  
stakeholders in Los  
Angeles and Ventura Counties. These benefits include the revision of water quality  
objectives,  
provision of tertiary recycled water and potential provision of desalinated recycled water  
that will  
support increased water recycling and thereby increase water supplies in the City of Santa  
Clarita  
and unincorporated areas of Los Angeles County. In addition, the AWRM Program will  
implement water supply facilities in Ventura County and provide desalinated recycled  
water to  
these water supply facilities that will allow for the conjunctive use of groundwater and  
surface  
water resources to increase water supplies and improve water quality in groundwater and  
surface  
waters of the Santa Clara River watershed.

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The Parties have determined that this MOU is an appropriate format for initiating implementation of the AWRM Program, and will benefit the water resources of the Santa Clara River Watershed.

The Parties desire to establish and maintain cooperative and reciprocal relationships with each

other for the planning and preliminary design of facilities and operations that will implement and

monitor the effectiveness of the AWRM Program. In order to do this, the Parties are willing to

designate individual representatives to participate in an Oversight Committee that will provide

oversight of the implementation of the AWRM Program.

The Parties acknowledge that a Joint Powers Authority (JPA) may be formed to implement

specific activities anticipated by this MOU.

The Parties recognize and acknowledge SCVSD's rights under California Water Code, Section

1210, as it pertains to the recycled water, whether tertiary or desalinated, that is produced from

the SCVSD's facilities. The Parties further recognize and acknowledge that the primary and first

use of all desalinated recycled water is to comply with requirements of the USCR Chloride

TMDL.

The UBWPs and UWCD have conferred and come to an agreement on the call for any desalinated recycled water for secondary uses in Los Angeles and Ventura Counties.

The Parties recognize that the implementation of the AWRM Program is subject to the California

Environmental Quality Act, Public Resources Code Sections 21000 et seq ("CEQA").

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Parties intend by this MOU to address the manner in which they intend to fulfill their responsibilities under CEQA in regard to the AWRM program and the project specific actions

that may be taken by the Parties. This MOU is not intended to limit the Parties' discretion to

consider alternatives and additional mitigation measures in regard to the AWRM Program.

#### MEMORANDUM OF UNDERSTANDING

The Parties therefore agree as follows:

Guiding Principles for AWRM Program. The Parties agree to abide by a set of guiding principles, as described in Exhibit I, for the implementation of the AWRM Program, as well as

any adaptation of the AWRM Program, if necessary, in the future.

Revisions to Surface Water and Groundwater Water Quality Objectives and Associated Final Chloride Waste-Load Allocations and Effluent Permit Limits. The Parties agree to

support the revisions to the surface water and groundwater water quality objectives and all associated final chloride waste-load allocations and final effluent permit limits for the Saugus and Valencia WRPs set forth in Exhibit 1, as well as any regulatory actions necessary to allow groundwater to be discharged. The Parties agree to submit written and oral testimony to the Regional Board, the State Water Resources Control Board, and the United States Environmental Protection Agency, Region IX encouraging adoption of such revisions. The Parties also agree to undertake advocacy and outreach activities necessary to obtain the support and acceptance of stakeholder groups within their jurisdictional boundaries for the revisions to water quality objectives and associated final waste-load allocations and effluent permit limits necessary to implement the AWRM Program.

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Uses of Desalinated Recycled Water. In accordance with the California Water Code, Section

1210, the SCVSD will designate uses of its desalinated recycled water, at its sole discretion, as follows:

1.3.1 Primary Uses of Desalinated Recycled Water. The primary and first use of all desalinated recycled water is for SCVSD compliance-related purposes, which include but are not limited to: (1) complying with water quality objectives for Reaches 44, 48, and 5; (2) protecting salt-sensitive agricultural beneficial uses inigated with Reach 48 surface water as required in the USCR Chloride TMDL; (3) removing past excess chloride load above 17 mg/L from East Piru Basin groundwater that is attributed to the District's facilities; and (4) maintaining a salt balance so that any future cumulative incremental chloride load above 17 mg/L to Reach 48 surface water that is attributed to the District's facilities is removed through the AWRM Program, as required in the USCR Chloride TMDL.

1.3.2 Secondary Uses of Desalinated Recycled Water. To the extent that SCVSD does not use its desalinated recycled water for the primary uses identified in Section 1.3.1, and there is sufficient supply available for secondary uses, the SCVSD will make available an amount up to 3 MGD of its remaining desalinated recycled water for calls for utilization by the UBWPs and the UWCD. In the event that the UBWPs desire to implement a program to augment local water supplies by beneficial use of the desalinated recycled water when the desalinated recycled water is not needed to meet the primary uses

described in Paragraph 1.3.1, the UBWPs and UWCD shall meet and confer in good faith to develop a mutually agreed-upon division of any available desalinated recycled water for secondary uses. Deliveries of secondary use desalinated recycled water to the UBWPs or UWCD will be accommodated under recycled water agreement(s) between the party(ies) receiving deliveries and the SCVSD.

1.3.3 Future Rights to Desalinated Recycled Water. Because SCVSD's primary and first use of desalinated recycled water from facilities implemented under the AWRM program is for compliance related purposes, in accordance with Section 1.3.1, any secondary uses of desalinated water or delivery to the UBWPs or UWCD are not guaranteed. As such, any secondary use of desalinated recycled water from the AWRM Program or delivery to Los Angeles or Ventura Counties will not establish any right on the part of any recipient or other entity to future deliveries of any quantity of desalinated recycled water from the SCVSD.

Implementation of Party Commitments. Subject to completion of any required procedures under CEQA, each Party agrees to implement their respective commitments as described in the

AWRM Program, and as follows:

1.4.1 SCVSD Commitments. Subject to compliance with CEQA, the SCVSD agrees to implement the following commitments in support of the AWRM Program:

(a) Self-regenerating Water Softeners: The SCVSD shall continue with the planning and implementation of outreach programs and legal procedures for voluntary and mandatory removal of self-regenerating water softeners (SRWS).

(b) Other Source Control Activities. The SCVSD shall consider funding other cost-effective

source control activities on a case-by-case basis, if circumstances in the future necessitate the need for additional chloride reduction.

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(c) AWRM Environmental Impact Report and Wastewater Facilities Plan: The SCVSD shall act as the Lead Agency and complete planning and programmatic environmental analysis under the California Environmental Quality Act ("CEQA") of the AWRM Program elements specified in Exhibit I in an Environmental Impact Report (EIR). In addition, the SCVSD shall complete facilities planning and project level CEQA analysis of the following wastewater-treatment related elements of the AWRM Program:

i. Conversion of the disinfection processes at the Saugus and Valencia WRPs to Ultra-Violet Light Technologies.

ii. Construction of an advanced treatment facility at Valencia WRP, consisting of microfiltration (MF) and reverse osmosis (RO).

iii. Construction of brine disposal facilities associated with the brine generated from reverse osmosis technologies.

iv. Construction of a desalinated recycled water conveyance pipeline from Valencia WRP to the Camulos Ranch surface water diversion.

(d) Certification of AWRM EIR and Wastewater Facilities Plan: The SCVSD shall act as the Lead Agency and consider certification of the AWRM EIR and Wastewater

Facilities Plan in accordance with CEQA, which will include an assessment of the elements identified in 1.4.1(c) of this MOU by May 4, 2011 (TMDL Task 13a due date). Other signatories to this MOU may act as responsible agencies for the AWRM EIR, or use the AWRM EIR in connection with their own project approval processes.

(e) Early Start Recycled Water Project: The SCVSD shall work with the UBWPs to develop an early start recycled water project. The objectives of the early start recycled water project are to utilize recycled water from the Saugus Water Reclamation Plant and to reduce the risk of invasive fish migration to critical downstream habitats.

(f) Recycled Water Agreement: The SCVSD and CLWA shall amend or replace the existing recycled water agreement to expand the quantity of recycled water that can be purchased by CLWA from the SCVSD.

(g) CLWA's Recycled Water Program: The SCVSD shall support the implementation of the CLWA's Recycled Water Program, through in-kind services to support regulatory reports/activities needed to utilize recycled water, lobbying efforts to secure grant funds for recycled water infrastructure investments, and in-kind technical support for the CLWA's application for low-interest State Revolving Fund (SRF) loans for the construction of recycled water infrastructure facilities.

(h) Minimum Streamflow Study: Because the supply of recycled water is limited by minimum streamflow requirements in Reach 5 of the Santa Clara River, the SCVSD, together with the UBWPs and possibly others, shall fund a minimum streamflow study to quantify the habitat requirements of Reach 5. The cost allocation of this study shall be determined by mutual agreement.

(i) Groundwater Recharge Program in Los Angeles County: In the event that the UBWPs desire to implement a groundwater recharge program with recycled water, for the purpose of augmenting Los Angeles County water supplies, the SCVSD shall support the UBWPs efforts to obtain regulatory approvals from the Los Angeles Regional Water Quality Control Board, California Department of Public Health, and State Water Resources Control Board, as necessary. Support shall include written

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and oral testimony and in-kind technical support on regulatory and technical reports and documents needed to utilize secondary use desalinated recycled water to augment local water supplies.

Completion of Wastewater Facilities: Subject to the scheduling provisions of Section 1.4.5, the SCVSD shall complete and operate the approved wastewater facilities addressed in the Final AWRM EIR and Wastewater Facilities Plan by May 4, 2015 (Revised TMDL Task 13d due date).

Ventura County Water Supply Facilities Scope of Work: The SCVSD shall contract with a firm or firm(s) that are jointly selected by the SCVSD and UWCD, to prepare a conceptual engineering design and engineer's cost estimate for the following Ventura County water supply facilities within 12 months of the approval date of the revised Chloride TMDL:

i. East Piru extraction well network, consisting of 10 extraction wells, with a rated pumping capacity of 2,000 gallons per minute per well.

ii. East Piru conveyance pipelines, consisting of:

1. Desalinated recycled water conveyance pipeline from the Camulos Ranch surface water diversion to the East Piru extraction well network.

2. Blended discharge (RO + Extracted Groundwater) conveyance pipeline from the East Piru extraction well network to the Santa Clara River near the Fillmore Fish Hatchery in Reach 44' of the Santa Clara River.

The engineer's cost estimate will include the cost for CEQA documentation and construction permitting of the Ventura County water supply facilities. Once completed and approved by the SCVSD and UWCD (or another designated Lead Agency), the conceptual engineering design and cost estimate shall be identified as Exhibit 2 of this MOU, and serve as the agreed-upon scope of work and the basis for the SCVSD's financial commitment and CEQA analysis for the implementation of the Ventura County water supply facilities for the AWRM Program.

(l) Financing - Design, Permitting, CEQA Documentation and Construction of the Ventura County Water Supply Facilities: The SCVSD shall finance the design, construction permitting, CEQA documentation, construction and construction management of the facilities identified in Exhibit 2 of this MOU, subject to and contingent upon all of the following:

i. The Lead Agency for the implementation of the facilities identified in Exhibit 2 has completed and certified a Project Level EIR, procured all necessary permits for construction of the recommended project, and completed all commitments identified in Section 1.4.3(c);

ii. The construction and cost of the facilities is in accordance with the final design and bid documents for the specific facilities identified in Exhibit 2.

iii. The SCVSD's financial responsibility is limited to the cost of design, construction permitting, CEQA documentation, construction, and construction management for only those facilities identified in Exhibit 2 of this MOU. The SCVSD's financial commitment for CEQA documentation and construction permitting will not exceed the cost estimate for these tasks, as identified in Exhibit 2, unless approved by the SCVSD. Any incremental (k)

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costs associated with the design, permitting, CEQA documentation, construction, and construction management of other facilities implemented by the Lead Agency that are outside the agreed upon scope of work, will be the responsibility of the Lead Agency.

The SCVSD has the right to review and approve design and bid documents, with the selection of the recommended contractor(s) by the Lead Agency, based on the lowest competitive bid.

The SCVSD has reviewed all pertinent construction management records, for the purpose of resolving any disputes related to cost of constructing the facilities identified in Exhibit 2.

The SCVSD has established an escrow account with the Lead Agency to fund the implementation of the Ventura County water supply facilities through a mutually agreed upon disbursement process that is tied to the achievement of project milestones and deliverables approved by the SCVSD.

(m) Operation and Maintenance Costs of Ventura County Water Supply Facilities: During the operation of the Ventura County water supply facilities, the SCVSD shall pay the proportionate cost of the operation and maintenance of the Ventura County water supply facilities associated with removing past excess chloride load above 117 mg/L from East Piru Basin groundwater attributed to its facilities and any future incremental load of chloride above 117 mg/L to Reach 48 surface water attributed to its facilities. The proportionate cost of operation and maintenance of these facilities will be calculated based on procedures that will be mutually determined by the SCVSD and UWCD. When these procedures are determined, they will be identified as Exhibit 3 of this MOU.

(n) Alternative Water Supplies to Reach 48 Surface Water Diverters: The SCVSD shall provide an alternative water supply that is of suitable quality and quantity to surface water diverters in Reach 48 of the Santa Clara River, when the surface water quality exceeds 117 mg/L at the Santa Clara River near the Los Angeles - Ventura County Line. This provision is contingent upon the execution of a separate agreement between the SCVSD and Reach 48 surface water diverter(s) which, when completed, will be identified as Exhibit 4 of this MOU, and will, at a minimum, include the following terms and conditions:

- i. Any Reach 48 surface water diverter must provide evidence of its legal right to divert surface water from Reach 48 of the Santa Clara River;
- ii. Any Reach 48 surface water diverter must identify the acreage and location by street address or assessor's parcel number of each salt-sensitive crop (i.e. avocados, strawberries, and nursery crops) that is irrigated with surface water diverted from Reach 48 of the Santa Clara River.

(o) Early Start Supplemental Water Releases: Prior to the completion of the wastewater treatment facilities identified in Section 1.4.1(c), the SCVSD shall make all reasonable efforts to procure supplemental waters for release to the Santa Clara River for the purpose of enhancing the assimilative capacity of the Santa Clara River, improving water quality conditions in Reach 48, and if possible, attaining water quality objectives. The procurement of these early start supplemental waters is contingent upon a number of factors and will be obtained through a separate agreement with the UBWPs, as discussed in Section 1.4.2.

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Performance Requirements for Supplemental Water Release: The SCVSD shall establish performance requirements for supplemental water releases to Reaches 5 and 6 of the Santa Clara River, and provide them to the UBWPs to develop a plan, approved by the SCVSD, that provides for supplemental water releases in accordance



with Section 1.4.2(b).

Financing - Design. Permitting. CEQA Documentation and Construction of New Supplemental Water Facilities. If the supplemental water plan in Section 1.4.2(b) involves the construction of new facilities (i.e. conveyance pipelines to the Santa Clara River), the SCVSD will finance the design, construction permitting, CEQA documentation, construction and construction management of any new supplemental water facilities subject to and contingent upon all of the following:

- i. The SCVSD and Lead Agency, identified in Section 1.4.2(c) shall agree on the scope of work and cost estimate for any new supplemental water facilities necessary to implement the AWRM Program. The SCVSD will contract with a firm or firms that are jointly selected by the SCVSD and UBWPs, to prepare a conceptual engineering design and engineer's cost estimate for new supplemental water facilities identified in the supplemental water plan. The engineer's cost estimate shall include the cost for CEQA documentation and construction permitting of the new supplemental water facilities. Once completed and approved by the SCVSD and Lead Agency, the conceptual engineering design and cost estimate shall be attached with Exhibit 5 of this MOU (supplemental water agreement and plan), and serve as the agreed upon scope of work and the basis for the SCVSD's financial commitment and CEQA analysis for the implementation of new supplemental water facilities.
- ii. The Lead Agency has completed and certified a Project Level EIR, procured all necessary permits for construction of the recommended project, and completed all commitments identified in Section 1.4.2(d).
- iii. The construction and cost of the facilities is in accordance with the final design and bid documents for the new supplemental water facilities.
- iv. The SCVSD's financial responsibility is limited to the cost of design, construction permitting, CEQA documentation, construction, and construction management for only those facilities in the agreed upon scope of work (attached in Exhibit 5). The SCVSD's financial commitment for CEQA documentation and construction permitting will not exceed the cost estimate for these tasks, unless approved by the SCVSD. Any incremental costs associated with the design, construction permitting, CEQA documentation, construction, and construction management of other facilities implemented by the Lead Agency that are outside the agreed upon scope of work, will be the responsibility of the Lead Agency.
- v. The SCVSD has the right to review and approve design and bid documents with the selection of the recommended contractor(s) by the Lead Agency, based on the lowest competitive bid.
- vi. The SCVSD has reviewed all pertinent construction management records, for the purpose of resolving any disputes related to cost of constructing any new supplemental water facilities.

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- vii. The SCVSD has established an escrow account with the Lead Agency to fund the implementation of any new supplemental water facilities through a

mutually agreed upon disbursement process that is tied to the achievement of project milestones and deliverables approved by the SCVSD.

(r) Modification of the Castaic Lake Flood Flow Agreement: The West Branch Contractors of the State Water Project and Downstream Water Users to the 1978 Castaic Lake Flood Flow Agreement, anticipate requesting a modification of the 1978 Castaic Lake Flood Flow Agreement with the California Department of Water Resources. In the event that such a modification is requested, the SCVSD shall support the modifications request through written and oral testimony to any necessary regulatory agencies, so long as these modifications are consistent with compliance with WQOs and requirements of the USCR Chloride TMDL.

(s) Extension of the Groundwater-Surface Water Interaction Model (GSWIM): Together with the UWCD, the SCVSD agrees to participate in the financing of the extension of the existing GSWIM from its current model boundary at the "A Street, Fillmore," to the "Santa Clara River at the Freeman Diversion." SCVSD's financial contribution shall be 75% of the total cost to extend the model boundary and will be contingent upon UWCD contributing the remaining cost to extend the GSWIM boundary and, in good faith, negotiating and securing low cost supplemental water, if available, on an annual basis for the term of the MOU, in accordance with Section 1.4.3(f).

(t) SCVSD Commitment Contingencies: The commitments described in Section 1.4.1 of this MOU may be terminated (by SCVSD) if any of the termination contingencies set forth in Section 1.9 of the MOU occur.

1.4.2 UBWPs Commitments. Subject to compliance with CEQA, the UBWPs agree to implement the following commitments in support of the AWRM Program:

(a) Support for Revisions to WQOs and Implementation of AWRM Program:

i. Revisions to WQOs: In accordance with the AWRM Program and Section 1.2 of this MOU, the Upper Basin Water Purveyors agree to support the necessary revisions to surface water and groundwater quality objectives and associated final waste-load allocations and effluent permit limits for chloride for the Saugus and Valencia WRPs.

ii. Implementation of AWRM: The implementation of the AWRM Program will require the SCVSD to make changes to the point of discharge, place of use, and/or purpose of use of its recycled water, and may require the SCVSD to file a wastewater change petition with the State Water Resources Control Board, in accordance with the California Water Code, Section 1211. The Upper Basin Water Purveyors will support the SCVSD efforts in the submittal of any wastewater change petitions required to support the AWRM Program, which include:

1. Wastewater change petitions for the purpose of recycled water uses in the Santa Clarita Valley and Piru Basin;
2. Wastewater change petitions for the purpose of changing the location of the point of discharge of the SCVSD's water reclamation plants.

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(b) Procurement of Supplemental Waters: Based on the performance requirements provided by the SCVSD, the UBWPs shall develop a supplemental water plan involving an imported water-local groundwater exchange program, in support of the

AWRM Program. The CLWA, on behalf of the UBWPs, shall develop a plan to procure, make reliable, deliver, treat, and convey imported water to replace local groundwater utilized as supplemental water as envisioned in the AWRM Program. To the fullest extent possible, the plan shall be developed to utilize available and unused Ventura County annual State Water Project (SWP) Table A and other water allocations, in cooperation with the UWCD as described in Section 1.4.3(0). The plan and its estimated costs shall be submitted to the SCVSD for review, comment, and approval. Based on the approved plan, the Upper Basin Water Purveyors shall execute the plan in accordance with an agreement to be negotiated (Exhibit 5). The SCVSD shall pay for the costs of executing the plan in accordance with the agreement (Exhibit 5) as well as provisions identified in Section 1.4.1(q), if applicable. The UBWPs shall make all reasonable efforts to execute the supplemental water plan for the AWRM Program. However, the UBWPs shall have no obligation to provide supplemental water for the AWRM Program to the SCVSD if extenuating factors outside the control of the UBWPs (i.e., earthquake, flood, fire, or legal challenges to use of banked or imported SWP water), prevent or impede the ability to execute the supplemental water plan.

(c) Lead Agency CEQA Responsibilities: The UBWPs (or another designated agency) agree(s) to be the Lead Agency for the purpose of completing any necessary project-level environmental assessments under CEQA related to the procurement of supplemental water, operating an imported water - groundwater exchange program, releasing supplemental waters to the Santa Clara River to improve water quality and attain water quality objectives, or constructing conveyance pipelines to route supplemental water to the Santa Clara River.

(d) Planning, Permitting, Design and Construction Costs for New Supplemental Water Facilities: If new supplemental water facilities are necessary, the Lead Agency will make all reasonable efforts to control the cost of any new supplemental water facilities that will be financed by the SCVSD in accordance with Section 1.4.1(q), and at a minimum, include the following review procedures:

i. The Lead Agency shall develop for SCVSD review and approval, a detailed project implementation schedule that identifies key project milestones/deliverables and a schedule for financial disbursements. When completed, the project implementation and finance disbursement schedule shall be attached within Exhibit 5.

ii. The Lead Agency shall document all change orders and impacts to project budget and submit them to the SCVSD for approval. Any cost overruns associated with change orders for the planning, construction permitting, design, construction, or construction management of new supplemental water facilities that are not approved by the SCVSD shall be the responsibility of the Lead Agency. SCVSD shall not unreasonably withhold approval of change orders that appropriately relate to the project.

The Lead Agency shall receive financial disbursements related to the planning, design, construction and construction management activities for new supplemental water facilities, through an escrow account that will be funded based on an agreed upon disbursement process between the Lead Agency and SCVSD that is tied to the

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completion of key project milestones and project deliverables in accordance with the detailed implementation schedule and bid documents.

(e) UBWPs Commitment Contingencies: The UBWPs commitments in Sections 1.4.2(a) through 1.4.2(d) are contingent upon the execution of a separate agreement between the SCVSD and UBWPs, which when completed, shall be identified as Exhibit 5 of this MOU, and which will be based on the following principles:

i. The UBWPs are made financially whole, in terms of the total cost to implement any supplemental water releases that support the AWRM Program.

ii. The UBWPs are provided replacement water of suitable quality and reliability for any local groundwater that is utilized as supplemental water in an exchange program with imported water supplies.

In addition, the UBWPs commitments in Sections 1.4.2 may be terminated (by the UBWPs) if any of the termination contingencies set forth in Section 1.9 of the MOU occur.

1.4.3 UWCD Commitments. Subject to compliance with CEQA, the UWCD agrees to implement the following commitments in support of the AWRM Program:

(a) Support for Revisions to WQOs and Implementation of AWRM Program:

i. Revisions to WQOs: In accordance with the AWRM Program and Section 1.2 of this MOU, the UWCD agrees to support the required revisions to surface water and groundwater quality objectives and associated final wasteload allocations and effluent permit limits for chloride for the Saugus and Valencia WRPs to implement the AWRM plan.

ii. Implementation of AWRM: The implementation of the AWRM Program will require the SCVSD to make changes to the point of discharge, place of use, or purpose of use of its recycled water, which may require the SCVSD to file a wastewater change petition with the State Water Resources Control Board, in accordance with the California Water Code, Section 1211. The UWCD will support the SCVSD efforts in the submittal of any wastewater change petitions required to support the AWRM Program, which include:

1. Wastewater change petitions for the purpose of recycled water uses in the Santa Clarita Valley and Piru Basin;

2. Wastewater change petitions for the purpose of changing the location of the point of discharge of the SCVSD's water reclamation plants.

(b) Lead Agency CEQA Responsibilities: UWCD (or another designated agency) agrees to act as the Lead Agency for the implementation of the Ventura County water supply facilities identified in Exhibit 2, and shall be responsible for any project-level environmental analysis required under CEQA for these facilities, and the procurement of any permits necessary for construction of these facilities.

(c) Planning/ Permitting/ Design and Construction Costs: The Lead Agency will make all

reasonable efforts to control the cost of the Ventura County Water Supply facilities

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that will be financed by the SCVSD in accordance with Section 1.4.10), and at a minimum, include the following review procedures:

i. The Lead Agency shall develop for SCVSD review and approval, a detailed project implementation schedule that identifies key project milestones/deliverables and a schedule for financial disbursements. When completed, the project implementation and finance disbursement schedule shall be attached within Exhibit 2.

ii. The Lead Agency shall document all change orders and impacts to project budget and submit them to the SCVSD for approval. Any cost overruns associated with change orders for the planning, construction permitting, design, construction, and construction management of the Ventura County water supply facilities that are not approved by the SCVSD shall be the responsibility of the Lead Agency. SCVSD shall not unreasonably withhold approval of change orders that appropriately relate to the project.

The Lead Agency shall receive financial disbursements related to the planning, design, construction and construction management activities for new supplemental water facilities, through an escrow account that will be funded based on an agreed upon disbursement process between the Lead Agency and SCVSD that is tied to the completion of key project milestones and project deliverables in accordance with the detailed implementation schedule and bid documents.

Ownership and Maintenance of Ventura County water supply facilities: Once constructed, the UWCD (or another designated agency) will assume ownership and maintenance responsibilities of the Ventura County water supply facilities and any permitting responsibilities associated with the operation and maintenance of the facilities identified in Exhibit 2 of this MOU.

Use of Developed Water Supplies: To the extent that AWRM Program activities result in water supplies that would otherwise not be available to UWCD, UWCD shall utilize its best efforts to utilize the developed water supplies from the AWRM Program to achieve sustainability with respect to current groundwater demand-supply imbalances within its service area.

Procurement of Supplemental Waters: Based on the UBWPs supplemental water plan (1.4.2(b)), the UWCD shall make good faith efforts to secure any available SWP water annually, as needed, from the Ventura County Table A allocation as supplemental water in support of the AWRM Program. UWCD's groundwater recharge operations receive primary consideration for any available SWP water from Ventura County's Table A allocation with any available balance secured to support the AWRM Program. UWCD, in good faith, will annually negotiate the purchase of any available SWP water at the lowest possible agreed upon rate with its partners, City of Ventura and Casitas Municipal Water District, review the purchase agreement with CLWA and SCVSD, execute the appropriate purchase agreement documents, and invoice CLWA and copy the SCVSD for the cost of purchasing any secured SWP water for the AWRM Program. The parties acknowledge that the City of

Ventura and Casitas may not wish to enter into a purchase agreement with UWCD. Thus, there is no guarantee that supplemental water can be obtained.

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(g) UWCD Commitment Contingencies: The commitments described in Sections 1.4.3 of this MOU may be terminated (by UWCD) if any of the termination contingencies set forth in Section 1.9 of the MOU occur.

1.4.4 VCAWQC Commitments. The VCAWQC agrees to implement the following commitments in support of the AWRM Program:

(a) Support for Revisions to WOOs and Implementation of AWRM Program:

i. Revisions to WOOs: In accordance with the AWRM Program and Section 1.2 of this MOU, the VCAWQC agrees to support the necessary revisions to surface water and groundwater quality objectives and associated final wasteload allocations and effluent permit limits for chloride for the Saugus and Valencia WRPs.

ii. Implementation of AWRM: The implementation of the AWRM Program will require the SCVSD to make changes to the point of discharge, place of use, and/or purpose of use of its recycled water, which may require the SCVSD to file a waste water change petition with the State Water Resources Control Board, in accordance with the California Water Code, Section 1211. The VCAWQC will support the SCVSD efforts in the submittal of any wastewater change petitions required to support the AWRM Program, which include:

1. Wastewater change petitions for the purpose of recycled water uses in the Santa Clarita Valley and Piru Basin;

2. Wastewater change petitions for the purpose of changing the location of the point of discharge of the SCVSD's water reclamation plants.

(b) Use of Developed Water Supplies. VCAWQC shall support UWCD's efforts to utilize developed water supplies from the AWRM program to achieve sustainability with respect to current groundwater demand-supply imbalances within its service area.

(c) VCAWQC Commitment Contingencies: The commitments described in Sections 1.4.4 of this MOU may be terminated (by VCAWQC) if any of the termination contingencies set forth in Section 1.9 of the MOU occur.

1.4.5 Schedule of Implementation Commitments. The Parties have prepared a preliminary schedule, attached in Exhibit 1, which describes the tasks and estimated time to implement the AWRM Program by each of the respective parties. The SCVSD shall be responsible for implementing all wastewater related facilities as identified in Section 1.4.1(c). The UWCD or another designated Lead Agency shall be responsible for implementing all Ventura County water supply facilities as identified in Exhibit 2. The UBWPs or another designated agency shall be responsible for implementing all supplemental water activities and, if necessary, construct facilities as identified in Section 1.4.2(b) and 1.4.2(d). Detailed schedules of the implementation activities of each party shall replace the schedules in Exhibit 1, as they are developed and completed. The

Parties acknowledge that the AWRM Program implementation will be an ongoing and evolving process and may change due to future amendments to the AWRM Program, challenging implementation issues or other unforeseen circumstances. The Parties agree that if delays in the implementation schedule occur because of the circumstances

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## 1.5

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discussed above, the SCVSD will request and the UWCD and VCAWQC will support extensions in the TMDL Implementation Schedule from the Regional Board, as appropriate, in order to accommodate such delays for the TMDL. Any changes or adaptations to the AWRM Program or AWRM Program implementation schedule shall be made in accordance with Section 1.6 of this MOU.

**Program Committee Oversight.** The General Manager or President of each Party (or their designees) shall meet as the AWRM Program Oversight Committee ("Oversight Committee")

within 30 days of the execution of this MOU. The Oversight Committee may establish appropriate subcommittees, if necessary, to implement the AWRM Program and determine the

meeting times and locations for the various committee/subcommittee meetings. The Oversight

Committee or subcommittees will discuss and coordinate the implementation and monitoring of

the AWRM Program, and, if necessary, develop a mutually agreed upon mediation process to

resolve any disputes that may arise between the Parties during the implementation of the AWRM

Program.

**Adaptation of the AWRM Program.** The Oversight Committee will be responsible for making

determinations of any necessary adaptations of the AWRM Program that are necessary during

implementation. Adaptation of the AWRM Program must be approved by all Parties, and effectuated through an amendment of the MOU describing the adaptations of the AWRM Program mutually agreed upon by all Parties.

**Term.** This MOU shall remain in effect until May 4, 2016 and shall be automatically renewed for

additional one-year increments thereafter unless otherwise unanimously decided by members of

the Oversight Committee that the term of the MOU shall be allowed to expire.

**Duplicate Originals.** This MOU shall be executed as duplicate originals, each of which, when so

executed, will be deemed to be an original and all of which taken together will constitute one and

the same agreement.

Termination Contingencies. The Parties may elect to terminate this MOU in the event of any of the following contingencies, in which case this MOU shall be of no further force and effect:

1.9.1 Should the Regional Board, State Water Resources Control Board, U.S. EPA, Region IX, or the California Office of Administrative Law fail to revise the water quality objectives for groundwater and surface water to the values shown in Exhibit I, as necessary to implement the AWRM Program.

1.9.2 Should any of the Lead Agencies responsible for implementing major elements (i.e. Conversion to Ultra Violet Disinfection Technology, Procurement of Supplemental Waters, Advanced Treatment Facilities at the Valencia WRP, Brine Disposal Facilities, East Piru Extraction Well Network, Desalinated Recycled Water Pipelines to Camulos Ranch and East Piru, or East Piru Blended Discharge Conveyance Pipeline - Exhibit I) of the AWRM Program fail to complete or certify the necessary environmental impact reports or other assessments needed to comply with CEQA.

1.9.3 Should any of the Parties not implement their specific commitments as specified in Sections 1.4. I through 1.4.4 of this MOU.

If such termination contingencies occur, all commitments described in Sections 1.4. I through

1.4.4 of this MOU shall terminate and be of no further force or effect. In the event of MOU

termination, each party shall bear their own project-specific costs incurred prior to termination.

Any controversies concerning the responsibility for such costs shall be subject to mediation upon

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terms to be agreed upon by the Oversight Committee. This MOU does not in any way relieve the

Parties of any obligations under the TMDL. Inability by any Party to complete AWRM Program

element implementation on schedule (Exhibit I), due to circumstances beyond the Party's reasonable control as determined by the Oversight Committee, shall not constitute grounds for termination of this MOU.

1.10 Warranties of Authority. Each Party hereby represents and warrants that it is fully authorized to enter into this MOU; that it has taken all necessary internal legal actions to duly approve the



making and performance of this MOU; that no further internal approval is necessary; and that the

making and performance of this MOU does not violate any provision of any governing statutes or

regulations, articles of incorporation, charters or by-laws.

1.11 Exhibits for the MOU. The exhibits for this MOU are as follows, with Exhibits 2 through 5 to

be included in the future, when such exhibits are developed by the parties and become available:

1.11.1 Exhibit I - The Alternative Water Resources Management Program

1.11.2 Exhibit 2 - Conceptual Engineering Design, Cost Estimate and Scope of Work for the

Ventura County Water Supply Facilities of the AWRM Program

(To be developed and attached to this MOU in the future)

1.11.3 Exhibit 3 Procedures for the Determination of Future Operation & Maintenance Costs

of the Ventura County Water Supply Facilities of the AWRM Program Between the SCVSD and the UWCD

(To be developed and attached to this MOU in the future)

1.11.4 Exhibit 4 - Alternative Water Supply Agreements Between the SCVSD and Santa Clara

River, Reach 48 Surface Water Diverters

(To be developed and attached to this MOU in the future)

1.11.5 Exhibit 5 - Supplemental Water Agreement, Supplemental Water Plan, and Conceptual

Engineering Design / Cost Estimate / Scope of Work for the Supplemental Water Facilities of the AWRM Program

(To be developed and attached to this MOU in the future)

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servation District

General Manager

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Dare: fa/rc/o&

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The Parties are signing this MOU as follows.

United Water

By:

Newhall

By:

Santa Clarita Water Division

y Waterworks District

Ventura County Aericultural Water Ouality

coalition

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Santa Clarita Valley Sanitation District  
of Los Angeles County

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By:

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By:

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Exhibit 1 - Alternative Water Resources Management Program

Upper Santa Clara River Chloride TMDL Background

The California Regional Water Quality Control Board - Los Angeles Region (Regional Board) adopted the Upper Santa Clara River (USCR) Chloride Total Maximum Daily Load

(TMDL) in 2002, establishing waste-load allocations for the Santa Clarita Valley Sanitation

District's (SCVSD) Valencia and Saugus WRPs at 100 mg/l. Amendments to the TMDL in

2004 and 2006 established a phased TMDL approach, which allowed for the development of

several scientific studies and potential site-specific objectives (SSOs) for chloride that the Regional Board may consider to revise the existing 100-mg/L water quality objectives (Waos).

The TMDL implementation schedule specified, among other requirements, that special scientific

studies be conducted to: a) evaluate the appropriate chloride threshold for the protection of

sensitive agriculture; b) evaluate the appropriate chloride threshold for the protection of endangered species; and c) develop a groundwater/surface water interaction model to evaluate

the impacts of chloride loading from all sources on water quality. The results of these studies

would then become the technical basis by which potential SSOs for chloride could be developed

for Regional Board consideration. The TMDL required development of these studies in a collaborative process to ensure substantial agreement between the Regional Board staff, SCVSD's staff, and other stakeholders, regarding the scientific and technical basis for

establishing water quality objectives for chloride. Each of the major studies conducted as part of the TMDL and their current status are summarized as follows.

Threatened and Endangered Species Chloride Threshold Study (T&Es Study) - The T&Es Study was completed in November 2007 and determined that the 1988 United States Environmental Protection Agency ambient water quality criteria for chloride for the protection of aquatic life (230 mg/L Cl as chronic and 860 mg/L Cl as acute) are protective of locally important T&Es.<sup>i</sup> The chloride threshold for the protection of locally important T&Es was considerably higher than the threshold range for the protection of salt-sensitive agriculture.

Agricultural Chloride Threshold Study (Ag Study) - The Ag Study was a two-part study, with a Literature Review and Evaluation (LRE) completed in September 2005," and an evaluation of the appropriate averaging period completed in January 2008.<sup>iii</sup> The Ag Study determined that the appropriate chloride threshold for salt-sensitive agriculture 'Advent-Environ,2007. Evaluation of Chloride Water Quality Criteria Protectiveness of Upper Santa Clara River Aquatic Life: An Emphasis on Threatened and Endangered Species. May 2007 . " CH2M Hill, 2005. Final Report: Literature Evaluation and Recommendations, Upper Santa Clara River Chloride TMDL Collaborative Process. September 2005.

<sup>iii</sup>NewFields Agricultural and Environmental Resource,2007. Technical Memorandum: Compliance Averaging Period for Chloride Threshold Guidelines in Avocado. December 2007. August 15, 2008 1

#### Exhibit I - Alternative Water Resources Management Program

(avocados, strawberries, and nursery guideline range between 100 and approximately 3 months.

crops) grown in the USCR watershed is a 117 mg/L Cl, with an averaging period of

Groundwater - Surface water Interaction Model (GSWIM) Study - The GSWIM Study developed a calibrated numerical model in March 2008,<sup>iu</sup> to evaluate the impact of WRP effluent discharges to the river on downstream surface water and groundwater in the Los Angeles and Ventura County portion of the Santa Clara River watershed. The GSWIM is now being utilized to evaluate various alternatives to comply with the existing water quality objectives and potential SSOs in consideration. One of the alternatives being considered is the Alternative Water Resources Management (AWRM) Program, which is described in more detail below.

Site Specific Objectives (SSO) and Anti Degradation Analysis (ADA) Study - The SSO and ADA Study provides the technical and regulatory basis for the Regional Board to consider potential SSOs that support the AWRM Program, as discussed in more detail below. As part of the SSO effort, a white paper on the agricultural beneficial uses in Reaches 5 and 6 of the USCR was developed in September 2007,' which assessed whether salt-sensitive agriculture was an existing or potential beneficial use. The white

paper concluded that salt-sensitive agriculture was not an existing or potential beneficial use for surface water or underlying groundwater that could be impacted by surface water in Reaches 5 and 6. Since salt-sensitive agriculture was not an existing or potential beneficial for the surface waters or underlying groundwater that could be impacted by surface water in these reaches, SSOs higher than the Ag Study threshold range of 100-117 mg/L are potentially possible, and are being considered as part of the AWRM Program. The SSO-ADA study has recommended the following SSOs for chloride, TDS and sulfate for surface water reaches and groundwater in the USCR watershed, as shown in Table 1:

u CH2M Hill, 2008. Final Report: Task 28-1 - Numerical Model Development and Scenario Results, East and Piru Subbasins. March 2008.  
 u Santa Clarita Valley Sanitation District, 2007. White Paper No. 2A Agricultural Beneficial Use Considerations for Santa Clara River - Reaches 5 and 6., September 2007.  
 ui Larry Walker and Associates. Draft Report: upper Santa Clara River Chloride TMDL Task 7 and 8 Report- Site Specific Objective and Anti-degradation Analysis., July 2008.  
 August 15, 2008 2

#### Exhibit I - Alternative water Resources Management program

##### Table 1 -SSOs to Support AWRM Program

##### Surface Water SSOs for AWRM Program

##### Mineral

##### WQO

Reach 48'

(3 to 12-month avo.)

Reach 5

(12-month avq.)

Reach 6

(12-month avo.)

Chloride 4€

117 (SWP Cl < 80 ppm)

130 (SWP Cl >= 80 ppm)

{e0

'150

{€

150

TDS 1 300 1 000 1 000

Sulfate 600 400 3€€450

##### Groundwater SSOs for AWRM Program

##### Mineral

##### WQO

East Piru

(3 to 12-month avo.)

Castaic Valley

(12-month avo.)

Santa Clara -

Bouquet & S.F. Canyons

(12-month avq.)

Chloride 25 to 130 (TBD) 150 to 150

TDS 25 to 1300 (TBD) 1000 to 1000

Sulfate 25 to 600 (TBD) 350 to 450

When water quality in Reach 48 (Blue Cut) exceeds 117 mg/L, an alternative water to (Blue exceeds 117 mg/L, an alternative

Reach 48 surface water diversions to protect salt-sensitive agricultural uses.

supply provided

Alternative Water Resources Management Program Background

Since November 2007, the Santa Clara Valley Sanitation District (SCVSD), Ventura County Agricultural Water Quality Coalition (VCAWQC), United Water Conservation District

(United Water), and the Upper Basin Water Purveyors" have been working together to develop

an alternative water resources management (AWRM) Program for the USCR Chloride TMDL.

The purpose of the AWRM Program is to develop a regional watershed solution for chloride as

an alternative to compliance with the existing 100 mg/L water quality objective, recognizing that

compliance with the existing 100 mg/L WQO would be a challenging and costly project, requiring many years to implement. The AWRM Program considers the use of SSOs and water

resource management facilities that would allow for the full protection of all beneficial uses,

while simultaneously providing a more feasible compliance solution, maintaining a chloride

balance in the USCR Watershed, and providing salt export and water supply benefits to Ventura

County stakeholders. Through this process, the SCVSD, VCAWQC, United Water, and the

Upper Basin Water Purveyors have come to conceptual agreement on the guiding principles,

u" Castaic Lake Water Agency, Valencia Water Company, Newhall County Water District, Los Angeles County

Water Works District No. 36, and the Santa Clara Water Division of the Castaic Lake Water Agency.

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Exhibit 1 - Alternative water Resources Management program

key elements, implementation tasks and agency responsibilities associated with the AWRM

Program. Discussion of the guiding principles, each of these specific elements of the AWRM

Program, and implementation task and agency responsibilities, is presented in the following sections.

#### The Guiding Principles of the AWRM Program

The following guiding principles have been established between the SCVSD, VCAWQC, United Water, and the Upper Basin Water Purveyors for the development and implementation of the AWRM Program:

- o The AWRM Program will strive to avoid and, if necessary, mitigate any water quality impacts to direct agricultural users of surface and groundwater from the Santa Clara River in East Piru (i.e., Camulos Ranch).

- . The AWRM Program will not cause long-term water quality degradation of groundwater, and agricultural uses of groundwater will be protected. (i.e., salt balance in any affected basin can be achieved within a reasonable time).

- . The AWRM Program will include a plan to improve groundwater quality in East Piru Basin and expedite water quality improvements. (i.e., water quality in groundwater and surface water in East Piru Basin will be improved before the end of the USCR Chloride TMDL implementation compliance period).

- . The AWRM Program will improve water supplies in Ventura county.

- . The AWRM Program will be implemented, monitored and funded by the Santa Clarita Valley Sanitation District.

- r The AWRM Program will provide for stakeholder oversight during implementation.

- . The AWRM Program must comply with regulations and protect all beneficial uses.

#### Key Elements of the AWRM Program

The AWRM Program consists of several key elements, which combined, would provide a regional watershed solution for the Upper Santa Clara River Chloride TMDL that benefits all

stakeholders within the watershed. The key elements of the AWRM Program include: (1) implementing measures to reduce chloride in the recycled water at the SCVSD's WRp discharges; (2) constructing advanced treatment for a portion of the recycled water from the

SCVSD's Valencia WRP; (3) procuring supplemental water (i.e. local groundwater or surface

water) for release to the Santa Clara River to improve water quality conditions and attain August 15, 2008

#### Exhibit I . Alternative Water Resources Management Program

WQOs; (4) constructing water supply facilities in Ventura County; (5) providing alternative water

supply to protect salt-sensitive agricultural beneficial uses of the Santa Clara River; (6) supporting the expansion of recycled water uses within the Santa Clarita Valley; and (7) revising

the surface water and groundwater WQOs to support all of these elements. Each of these key

elements is discussed in further detail. below.

#### Element No. 1: Reduction of Chloride Levels in WRP Recycled Water

As part of the AWRM Program, as well as any solution to the TMDL, the SCVSD will reduce the chloride levels in the recycled water discharged from the Valencia and Saugus WRPs. Reduction in the recycled water chloride levels would be achieved through enhanced

source control, specifically the removal of self-regenerating water softeners (SRWS), which are

a significant source of chloride to the SCVSD's sanitary sewer collection system, and conversion of the current beach-based disinfection facilities, which contribute an additional 10

mg/L of chloride in recycled water at each WRP, to Ultra-Violet Light Disinfection technology.

Through removal of SRWS and conversion to UV disinfection technologies, the incremental

chloride contribution from wastewater sources above the contribution from water supply can be

reduced to a level of approximately 50 mg/L. This reduction in chloride will allow for the SCVSD's Valencia and Saugus WRPs to comply with revised WQOs in varying water supply

chloride conditions, and minimize the amount of advanced treatment required. As discussed

below, revisions to the existing WQOs are necessary to support this AWRM Program element.

#### Element No. 2 Advanced Treatment at the SCVSD's Valencia WRP

While removal of chloride loading through enhanced source control would help the Saugus and Valencia WRPs comply with revised WQOs a majority of the time, additional

chloride reduction would still be necessary for compliance with downstream revised WQOs in

Reach 48, through the construction and operation of a 3 MGD advanced treatment facility,

using Micro-Filtration (MF) and Reverse Osmosis (RO) treatment technologies at the Valencia

WRP. These facilities would serve four purposes: (1) continuous removal of approximately

3,200 pounds per day of chloride from the WRP effluent; (2) reducing chloride levels in the

Santa Clara River in Reach 48, through discharge of the high quality Valencia RO product water

to the Santa Clara River, when necessary to achieve compliance with revised WQOs for this

reach; (3) delivering high quality Valencia RO product water to blend with surface water diversions in Reach 48 so that the irrigation water quality is of sufficient quality to protect saltwater

Imported water supply chloride concentrations have often exceeded 100 mg/L during drought conditions, due to the influence of poor quality imported water supplies delivered from the State Water Project stored at the Castaic Lake Reservoir.  
August 15, 2008 5

#### Exhibit I . Alternative Water Resources Management Program

sensitive agricultural uses, when necessary; and (4) providing a salt export and water supply

benefit to Ventura County through delivery of the high quality Valencia RO product water to the

Ventura County water supply facilities. These facilities and the salt export and water supply

benefits associated with these facilities are discussed in greater detail below.

In addition to the advanced treatment facilities, construction of brine disposal facilities to dispose of the brine waste from the RO treatment process via deep well injection would be

required. The use of deep well injection becomes a more plausible and sustainable brine disposal option, with a smaller advanced treatment facility, as proposed in the AWRM Program.

The brine disposal for a 3MGD MF-RO facility is estimated at 0.5 MGD.

As mentioned above, when necessary, the high quality Valencia RO product water would be discharged directly to the Santa Clara River to reduce chloride levels in the river and

comply with revised WQOs. Based on the results of the GSWIM Study, the discharge of Valencia RO product water to the river would occur, when chloride levels in the State Water

Project (SWP) water stored in the Castaic Lake Reservoir are greater than or equal to 80 mg/L.

The GSWIM study also found that the use of supplemental water released to the Santa Clara

River, discussed in more detail below, is needed in certain critical conditions of extreme drought

to assure compliance with the revised WQOs in Reach 48. Finally, a portion of the high quality

Valencia RO product water would also be delivered to blend with surface water diverted for

irrigation of salt-sensitive agriculture, so that the irrigation water quality is less than 17 mg/L. A

schematic of this operational management of the Valencia RO during conditions when the

imported SWP exceeds 80 mg/L is presented in Figure 1a.

Figure 1a. AWRM Operation when SWP Cl<sup>-</sup> 80 mg/L

East Piru

Extraction



Wells  
R0 for Alternative Water Supply  
FIIII  
I  
I  
WQO  
150  
R0 to SCR  
IYff WQO  
100  
WQO  
130  
fi.\*.t\$ Reach 6 Reach 4A ; Reach 48 Reach 5  
Saugus Aquifer  
Supplemental Water  
Los Angeles County  
3 MGD RO @ Valencia WRP  
August 15,2008  
Ventura County  
Saugus WRP

Exhibit 1 . Alternative Water Resources Management Program

In conditions when the chloride levels in the SWP water stored in the Castaic Lake Reservoir are below 80 mg/L, the GSWIM Study found that the high quality Valencia RO

product water does not need to be discharged to the Santa Clara River to comply with revised

WQOs. In fact, the GSWIM study estimates this condition occurs approximately 70o/o of the

time, which then would allow for the high quality Valencia RO product water to be delivered to

the Ventura County water supply facilities, in order to blend with high saline groundwater\*

underlying Reach 48 and produce a blended water supply that can be discharged into the wetted portions of Reach 44 of the Santa Clara River and comply with the existing 100 mg/L

WQO for this reach. The discharge of this blended water supply in the wetted reaches of the

Santa Clara River, where the "Dry Gap" ends, allows for greater base flow in the river, which

ultimately can then be diverted at the Freeman Diversion and increase water supplies for Ventura County. A schematic of this operational management of the Valencia RO deliveries to

the Ventura County water supply facilities during conditions when the imported SWP is less than

80 mg/L is presented in Figure 1b.

Figure Ib. AWRM Operation when SWP Cl < 80 mg/L

Blended RO + Groundwater

Discharge @ <95 mg/L

R0 for Extraction Wells 3 MGD RO @ Valencia WRP

WQO

150

Reach 4A Reach 48 Reach 5 Reach 6

Valencia WRP Saugus WRP

Ventura County Los Angeles County

i\* The groundwater in Reach 48 has chloride concentrations at 150 mgil.

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East Piru

Extraction

Wells

WQo 1 Wao

117 ' 150

Exhibit 1 - Alternative Water Resources Management Program

Element No. 3: Procuring Supplemental Water for Releases to the Santa Clara River

Recognizing that conducting environmental studies, permitting, designing and constructing an MF-RO facility at the Valencia WRP will take a significant period of time, the

AWRM Program includes a commitment, contingent upon the necessary environmental assessments required under the California Environmental Quality Act, to provide supplemental

water from the Saugus Aquifer and/or some other local water resource, to the Santa Clara River

as an interim measure prior to completion of the AWRM Program facilities. Additionally, as

discussed previously, the GSWIM study found that the use of supplemental water released to

the Santa Clara River would be needed during extreme drought conditions to comply with

revised WQOs for Reach 48. These supplemental waters would be delivered through contractual arrangements between the SCVSD and the Upper Basin Water Purveyors.

Element No. 4: Ventura County Salt Export and Water Supply Benefits

In order to export accumulated salt in groundwater and provide the water supply benefits for Ventura County, a key element of the AWRM Program is the construction of the Ventura

County water supply facilities, as shown in Figure 2.

Ventura Gounty L.A. Gounty Castaic Lake

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LEGEND

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RO Pipeline  
Extraction Wells  
I  
I I East Piru  
Extraction Wells  
5 Saugus Aquifer  
RO supplemental well

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These facilities which would allow for salt export and water supply benefits by blending high quality Valencia RO product water with more saline groundwater in East Piru, to develop a

Figure 2. AWRM Program Facilities

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Exhibit 1 - Alternative Water Resources Management Program

blended water supply that is less than 95 mg/L in chloride. The Ventura County water supply

facilities would be comprised of the following: (1) 10 groundwater extraction wells in the East

Piru groundwater basin; (2) a 12-mile RO product water conveyance pipeline from the Valencia

WRP to the East Piru extraction wells; and (3) a 6-mile conveyance pipeline for the blended

East Piru groundwater and Valencia WRP RO product water (East Piru Pipeline) for discharge

to Reach 44 of the Santa Clara River, downstream of the "Dry Gap."

Collectively, these facilities would be utilized for water supply and salt export benefits.

Through the blending of high quality Valencia RO product water with more saline groundwater

underlying Reach 48, a new blended water supply can be developed and managed, which will

not only export salt accumulated in groundwater in the East Piru basin, but comply with downstream surface water WQOs in Reach 44, and increase water supplies in Ventura County.

In addition, the extraction of more saline groundwater underlying Reach 48, will allow for greater

recharge of high quality storm flows in the SCR, which are typically low in chloride, lowering

chloride levels in the groundwater. The reduction in chloride levels associated with AWRM

Program, identified as "Piru Wellfield (Option 2d)," is presented in Figure 3.

Figure 3. Chloride in Groundwater in East Piru

Source: Bachman, Steve, 2008. Alternative Water Resources Management Program-  
Effects in Ventura County. June 2008.

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Chloride In Groundwater

Groundwater @ V-0013 (Eastem Piru Basin)

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..- RO to Ocean Base Case - Piru Wellfield (2d)

Exhibit I - Alternative Water Resources Management Program

The salt export from East Piru Basin and resultant reduction in saltwater intrusion  
provided by the increased water supply benefits, vastly outweigh the incremental loading  
above

the WQO that occurs during extreme drought conditions, when SWP chloride levels are  
elevated." A comparison of the yearly excess chloride loading above the existing (100  
mg/L)

and revised (117 mg/L) WQOs in Reach 48, with the yearly chloride export through the  
extraction wells and prevention of saline intrusion are shown in Figure 4.

Figure 4. Chloride Balance with the AWRM Program

7,000

6,000

5,000

4,000

3,000

2,000

1,000

0

Chloride Load above Chloride Load above Chloride Exported from Sea Water Intrusion

117 mg/L WQO 100 mg/L WQO East Piru Basin Prevented

Element No. 5: Protection of Salt-Sensitive Agricultural in Reach 48

The AWRM Program recognizes that chloride levels in Reach 48 of the Santa Clara  
River may exceed the protective range for salt sensitive agriculture of 100 - 117 mg/L  
chloride,

as determined by the Ag. Study, discussed previously. In order to protect this salt  
sensitive

agricultural beneficial use along Reach 48 of the SCR, the AWRM Program proposes to  
protect

surface water diversions along this reach of the SCR with a suitable alternative water  
supply,

when chloride concentrations in surface water exceed 117 mg/L making surface water  
quality

unsuitable for the direct irrigation of salt-sensitive crops with surface water. Alternative water supplies will be provided to temporarily protect salt-sensitive agricultural uses in Reach 48, through the delivery of high quality RO product water to blend with Reach 48 surface water

\* Imported water supply chloride concentrations have often exceeded 100 mg/L during drought conditions, due to the influence of poor quality imported water supplies delivered from the State Water Project stored at the Castaic Lake Reservoir.

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>10,000 AFY of additional water supply at Freeman Diversion

#### Exhibit 1 - Alternative Water Resources Management Program

diverted for irrigation of salt-sensitive crops, so that the blended irrigation water quality is 117

mg/L or less. The use of alternative water supplies allows for the full protection of beneficial

uses, during temporary and intermittent periods when water quality due to extreme drought

conditions does not support those beneficial uses.

Element No. 6; Support for Expansion of Recycled Water Uses in the Santa Clarita Valley

The AWRM Program includes provisions to support recycled water uses in the Upper Basin Water Purveyor service areas. Increasing recycled water uses in the Santa Clarita Valley, will not only improve water supply reliability in the area, but also, reduce the chloride

loading directly discharged to the Santa Clara River From the WRP discharges.

Element No. 7: Revisions to WQOs to support the AWRM Program

As indicated above, the feasibility of the AWRM Program is dependent upon revising the existing water quality objectives for surface water and groundwater to various levels that support

the different elements of the AWRM Program. A summary of the recommended WQO revisions

for surface water and groundwater, in support of the AWRM Program, were previously presented in Table 1. Through revision of these surface water and groundwater WQOs, the amount of advanced treatment required to achieve compliance with these WQOs is significantly reduced, which allows for the disposal of brine wastes generated from the RO processes through deep well injection as opposed to the construction of a 43-mile brine line and ocean outfall. In addition, the revision of these WQOs would better facilitate the permitting of recycled water uses in the Santa Clarita Valley, which will improve water supply reliability in the area, and reduce the chloride loading from recycled water that can now be beneficially reused, as opposed to directly discharged to the Santa Clara River. Ultimately, the cumulative benefits of the AWRM Program elements will improve water quality in surface water and groundwater, improve water supplies to Ventura County, protect all beneficial uses, and reduce the amount of advanced treatment and associated brine disposal needed for compliance.

#### Implementation Tasks and Responsibilities for the AWRM Program

The SCVSD will be the lead agency for the development of a Programmatic Environmental Impact Report (PEIR) to assess the AWRM Program, and if appropriate, certify the PEIR, make CEQA findings, and approve the project. The SCVSD has the principal responsibility for carrying out and implementing the AWRM Program, because it is a necessary program to comply with the Upper Santa Clara River Chloride TMDL. In addition to the PEIR, the SCVSD will conduct a Facilities Plan for the necessary wastewater treatment facilities

1i August 15,2008

#### Exhibit I - Alternative Water Resources Management Program

associated with AWRM Program (i.e. UV Disinfection, MF-RO Facilities and Brine Disposal

Facilities). The United Water Conservation District (or another agency in Ventura County with

water supply responsibilities) will become the lead agency responsible for conducting Project

Level EIR / CEQA Assessments to implement the Ventura County water supply facilities associated with AWRM Program (i.e. Conveyance pipelines, East Piru extraction wells, and

East Piru pipeline). Finally, the Upper Basin Water Purveyors/SCVSD will identify a lead

agency for the purpose of conducting Project-Level EIR / CEQA Assessments to utilize and deliver supplemental water to achieve compliance on an interim and long-term basis for the AWRM Program. Figure 5 is a schematic that defines the proposed agency roles and responsibilities for implementing the necessary planning elements of the AWRM Program. Figure 6 is a preliminary implementation schedule associated with various, planning, design and construction activities required to implement the AWRM Program. The AWRM Program will achieve compliance with the schedule deadlines associated with TMDL Tasks 13a, 13b, 13c and 13d of the Upper Santa Clara River Chloride TMDL.

Figure 5. AWRM Program Implementation by SCVSD, United Water and Upper Basin Water Purveyors

AWRM Program  
 Programmatic EIR and  
 Wastewater Facilities Plan  
 (SCVSD)  
 L.A. County Water Supplies  
 Project-Level EIR/  
 CEQA Assessments  
 (Upper Basin Water Purveyors / SCVSD)  
 Ventura County Water Supplies  
 Project-Level EIR /  
 CEQA Assessments  
 (United Water)  
 August 15, 2008

Figure 6. Alternative Wetlands Mitigation Program Implementation Schedule

SCVSD Board Hearing to Award Contract  
 Contracting Documents/Construction Schedule  
 Construction  
 Start-up, Testing and Commissioning  
 TMDL Task 13d (Project Implementation/Completion) Due  
 TMDL Task 14 (Interim Limits Expire)  
 Wednesday 7/11/12 Wednesday 7/11/12  
 Thursday 7/12/12 Friday 7/13/12  
 Monday 10/15/12 Wednesday 10/15/14  
 Thursday 10/16/14 Thursday 4/16/15  
 Wednesday 5/4/16 Wednesday 5/4/16  
 Wednesday 5/4/16 Wednesday 5/4/16  
 0 days  
 67 days  
 523 days

'131 days

0

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Water Conseryalion Districl Facilities & Activities fhu4114111 Thu 4/'16/15 10it6

fhu 4114111 Fti 4113h2 262 Project Level CEQA,/EIR

Non-CSD Facilities Permitting

Non-CSD Facililies Design

Adverlise/Bid/Award Contract

Construction

Startup, Testing and Certifications

Upper Basin Water Putueyor Facilities E Activities

CEQA Assessmenis ( nterlm Supp emental Water)

Delivery of Inlerim Supplemental Water

Project Level CEQA/EIR (AWRM Supplemental Water)

Delivery of AWRIM Supplemental Water

Mon 4116112 fue 4116113 262 days

Mo^4116112 Tue 4/16/13 262 days

Wed4/17113 Thu 8/15/'13 eza" -i ^i

Fri 8i 16/13 Thu '10/16/14 305 daysl

Fti1ol17114 Thu4/16i'15 130daysl

Thu 10i2l08

Thu 10/2/08

Mon 10i 5/09

fhu 4114111

Mon 4i16112

thu 4/16/15

Fti 1012109

Ftl 4113t12

Fti 4t13112

Thu 4/16/15

1706 days

262 days

660

262

784

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ORIGINAL  
IN THE

# Court of Appeal of the State of California


IN AND FOR THE

## Fifth Appellate District

COURT OF APPEAL  
FIFTH APPELLATE DISTRICT  
FILED

APR - 1 2004

KAY FRAUENHOLTZ  
CLERK/ADMINISTRATOR

By  Deputy

SIERRA CLUB et al.,  
Plaintiffs and Appellants,

v.

COUNTY OF LOS ANGELES et al.,

Defendants and Respondents,

THE NEWHALL LAND & FARMING COMPANY et al.,

Real Parties in Interest and Respondents.

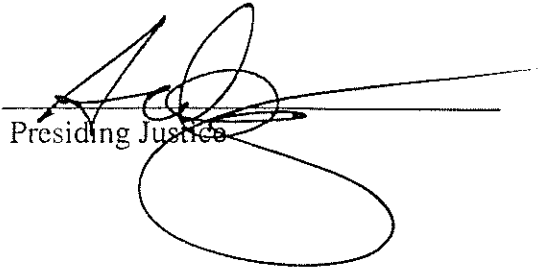
F044638

Kern County No. 239324

BY THE COURT:

Pursuant to written stipulation of the parties hereto, IT IS HEREBY ORDERED  
that the appeal in the above-entitled cause is dismissed.

- ☒ 1. Each party to bear his or her own costs.  
☒ 2. The remittitur shall issue forthwith.  
☐ 3. None of the above.

  
Presiding Justice

ORIGINAL

5TH CIVIL NO. F044638

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA  
FIFTH APPELLATE DISTRICT

United Water Conservation District,

Petitioner,

v.

County of Los Angeles, *et al.*,

Respondents.

The Newhall Land and Farming Company, *et al.*,

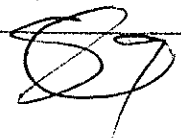
Real Parties in Interest.

And Related Cases.

COURT OF APPEAL  
FIFTH APPELLATE DISTRICT  
FILED

APR - 1 2004

KAY FRAUENHOLTZ  
CLERK/ADMINISTRATOR

By  Deputy

Appeal From The Judgment of The Kern County Superior Court  
The Honorable Roger D. Randall, Presiding  
(Kern County Superior Court No. 239324-RDR  
[Consolidated with Case Nos. 239325, 239326 and 239327-RDR])

NOTICE OF SETTLEMENT AND DISMISSAL OF APPEAL

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Attorneys for Petitioners/Plaintiffs, Sierra Club,  
Friends of the Santa Clara River, and Santa Clarita  
Organization for Planning the Environment

**NOTICE OF SETTLEMENT  
(APPELLATE COURT CASE NO. F044638)**

The parties to this settlement ("the Parties"), as defined below, through their respective counsel, have agreed as follows:

**I. THE PARTIES AND PURPOSE**

**A. THE PARTIES/EFFECTIVE DATE**

1. The Sierra Club, Friends of the Santa Clara River and Santa Clarita Organization for Planning the Environment ("Appellants") are represented by John T. Buse of the Environmental Defense Center and Jan Chatten-Brown of Chatten-Brown and Associates in the Newhall Ranch litigation and this appeal (*United Water Conservation District v. County of Los Angeles, et al.*, Case No. 239324-RDR [Consolidated with Case Nos. 239325, 239326 and 239327-RDR], 5th Civil No. F044638) ("Newhall Ranch Litigation").

2. The Appellants filed the "Notice Of Appeal From Order Granting Motion To Discharge Peremptory Writ Of Mandate" ("Notice of Appeal") on December 19, 2003 in connection with the Newhall Ranch Litigation. The Judgment appealed from disposed of all claims and causes of action between the Parties.

3. The County of Los Angeles and its Board of Supervisors ("the County") are represented in the Newhall Ranch Litigation by Lloyd W. Pellman, County Counsel, and Peter J. Gutierrez, Senior Deputy County Counsel. The County is not a party to this settlement, because there are no settlement provisions that require any action to be taken by the County to implement the settlement. Nonetheless, the County will benefit by this settlement due to the dismissal of this appeal, as discussed below. In addition, the counsel for the County has reviewed this Notice, and has no objection to the settlement.

4. The Newhall Land and Farming Company, a California limited partnership, Valencia Corporation, the Newhall Ranch Company, Newhall Management Limited Partnership and The Newhall Land and Farming Company, a California

corporation ("Newhall") are represented in the Newhall Ranch Litigation by Mark J. Dillon and Michael S. Haberkorn of Gatzke Dillon & Ballance LLP.

5. The effective date of this settlement will be March 29, 2004 ("Effective Date").

#### **B. PURPOSE**

1. The purpose of this settlement is to set forth the Parties' agreement, which shall result in the final settlement of the Newhall Ranch Litigation (*United Water Conservation District v. County of Los Angeles, et al.*, Case No. 239324-RDR [Consolidated with Case Nos. 239325, 239326 and 239327-RDR] 5th Civil No. F044638), the effect of which will be a complete dismissal, with prejudice, of the appeal, pursuant to Rule 20 of the California Rules of Court.

2. This settlement is a compromise of disputed claims, and neither this settlement nor any term thereof shall be construed as any type of admission on the part of any party to this settlement.

### **II. TERMS OF SETTLEMENT/DISMISSAL**

#### **A. AGRICULTURAL WATER SUPPLY**

1. As stated in the Revised Additional Analysis (Volume VIII; May 2003), the actual amount of groundwater pumped from the basin to irrigate Newhall's agricultural lands is calculated by utilizing Southern California Edison ("SCE") pump test data.

For pumps powered by electricity, SCE pump tests are used to calculate the actual amount of water pumped from the basin. The actual water pumping is calculated by multiplying the total kilowatt-hours (kwh) of energy used per well per year, by the kilowatt-hours per acre foot (kwh/AF), which is derived from the annual pump tests performed by SCE, Hydrologic Services Division. These pump tests are performed by SCE on an annual basis, which is customary in the agricultural industry. Newhall also requests that SCE perform these well pump tests for purposes of monitoring well efficiency and energy costs.

For pumps powered by diesel and natural gas, the actual water pumping is calculated by multiplying the actual running hours from engine hour meters by the acre-

feet pumped per hour. The acre-feet pumped per hour is determined by the gallons per minute that each unit is designed to pump.

The total water pumped from all Newhall agricultural wells, utilizing the SCE and other data, is summarized in Exhibit 1 to the letter report, dated March 7, 2003, from Underhill Engineering, Inc. The Underhill report, which was contained in **Appendix AB** in the Newhall Ranch Final Additional Analysis (Volume IV; March 2003) included Los Angeles County agricultural water use data over a five-year period (1996-2000). In addition, actual results of pump tests from SCE were included as **Appendix AQ** in the Newhall Ranch Final Additional Analysis (Volume VII; May 2003). At page 2.5-136 - 2.5-139, the Revised Additional Analysis (Volume VIII; May 2003) was revised to clarify the above information. In addition, at page 2.5-140, the Revised Additional Analysis included revised **Table 2.5-32**, which depicted Newhall's water use for its agricultural lands in Los Angeles County.

As shown on revised **Table 2.5-32**, using the actual SCE pump test data, a five-year annual average of 7,246 acre-feet of water per year was pumped by Newhall and utilized for irrigation of its crops in Los Angeles County. In addition, the County and Newhall used adjusted data from the California Irrigation Management Information System ("CIMIS"), which is provided by the University of California. The adjusted CIMIS data was used as a "cross check" to corroborate Newhall's allocation of the total amount of water actually pumped, as calculated from the SCE pump test and other data. Using the adjusted CIMIS data to compare to actual pumpage, a total of 7,038 acre-feet of water per year was determined to be the average amount of water used on Newhall's agricultural lands in Los Angeles County from 1996-2000. The revised Additional Analysis used the lower (and more conservative) of the two methods to determine the actual amount of groundwater pumped and delivered to Newhall's agricultural lands in Los Angeles County (*i.e.*, 7,038 AFY).

2. Newhall shall do the following:

- (a) **Groundwater Use/Limitations.** Groundwater historically and presently used for crop irrigation on the Newhall Ranch Specific Plan

site and elsewhere in Los Angeles County shall be made available by Newhall, or its assignee, to partially meet the potable water demands of the Newhall Ranch Specific Plan. The amount of groundwater pumped for this purpose shall not exceed 7,038 AFY. Newhall represents that this is the amount of groundwater pumped historically and presently by Newhall in Los Angeles County to support its agricultural operations, and that pumping this amount will not result in a net increase in groundwater use in the Santa Clarita Valley.

- (b) **Reporting.** To monitor groundwater use, Newhall, or its assignee, shall provide the County an annual report indicating the amount of groundwater used in Los Angeles County and the specific land upon which that groundwater was historically used for irrigation. After submitting the annual report to the County, Newhall, or its designee, will promptly provide the Appellants with a copy of such report, provided that the Appellants make a written request to Newhall for a copy of such report.
- (c) **Verification.** For agricultural land located off the Newhall Ranch Specific Plan site in Los Angeles County, at the time agricultural groundwater is transferred from agricultural uses on that land to Specific Plan uses, Newhall, or its assignee, shall provide a verified statement to the County's Department of Regional Planning and Appellants that Alluvial aquifer water rights on that land will now be used to meet Specific Plan demand.
- (d) **On-Going Documentation.** Beginning with the filing of the first subdivision map allowing construction on the Specific Plan site and with the filing of each subsequent subdivision map allowing construction, Newhall, or its designee, shall provide documentation to the County of Los Angeles and Appellants identifying the specific portion(s) of irrigated farmland in the County proposed to be retired from irrigated production to make agricultural water available to serve the subdivision. This documentation shall include the location of the irrigated agricultural fields to be retired and the types of planted crops on such land for the baseline five-year period 1996-2000. As a condition of subdivision approval, Newhall, or its designee, shall provide proof to the County that the agricultural land has been retired prior to issuance of building permits for the subdivision. A copy of the information provided to the County shall also be provided to Appellants.

## **B. AGRICULTURAL WATER QUALITY**

1. The Newhall Ranch Final Additional Analysis (Volume IV; March 2003) included water quality data from one of Newhall's existing agricultural wells, along with a map depicting its location ("C-Well"). The water quality testing data was considered representative of Newhall's other existing agricultural wells. Additional agricultural water quality data was presented in the *2001 Update Report, Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems*, July 2002, prepared by Richard C. Slade & Associates. The *2001 Update Report* was included as **Appendix 2.5(I)** to the Newhall Ranch Revised Draft Additional Analysis (Volume II; November 2002).

In addition, in response to public comments, Newhall provided water quality sampling from six additional Newhall agricultural-supply wells. The data was taken from sampling that occurred in 2000 and 2001. The additional water quality data was included in the Newhall Ranch Additional Administrative Record (AAR 107:116214-276). The data was consistent with the prior sampling data from the C-Well location.

2. Newhall shall do the following:

- (a) **ASR Program.** The Saugus Groundwater Banking/ASR program injection water must meet the water quality requirements of the State Regional Water Quality Control Board, Los Angeles Region. The water extracted for use on the Specific Plan site shall meet the Title 22 drinking water standards of the State Department of Health Services.
- (b) **Title 22 Standards.** The agricultural groundwater used to meet the needs of the Specific Plan shall meet the drinking water quality standards required under Title 22 prior to use. As part of the CEQA review for the first tract map of Newhall Ranch, Newhall shall provide data showing that the agricultural groundwater will meet the Title 22 standards and describe the treatment measures, if any, necessary to meet these standards.

## **C. FEES/COSTS**

1. Newhall shall pay Appellants' counsel a lump sum in the total amount of \$43,000.00, provided that this notice of settlement and a separate notice of abandonment of this appeal is filed and served with the appropriate courts, which results in the

dismissal of the pending appeal in the Newhall Ranch Litigation, consistent with Rule 20 of the California Rules of Court, within three court days from the Effective Date of this settlement.

2. Newhall's payment to Appellants' counsel shall be made within thirty days of the court's Order dismissing the pending appeal.

3. The County shall not be responsible for the payment of any fees or costs of any kind whatsoever arising from this settlement.

**D. DISMISSAL**

1. Pursuant to California Rules of Court, Rule 20, the Appellants request that this Court (5th Civil No. F044638) enter the Order, below, dismissing the appeal and the entire action with prejudice. Remittitur to be issued forthwith.

**E. OTHER PROVISIONS**

1. The execution of this settlement shall not be construed by any party as an admission of liability or an admission as to the truth or falsity of any claim, allegation, defense or fact, which is the subject of this settlement.

2. This settlement shall have no force or effect unless and until the court issues an order dismissing the pending appeal in the Newhall Ranch Litigation.

3. All Parties to this settlement represent and warrant that they are the owner of the claims which are the subject of this settlement, and that such claims have not been assigned or transferred to any person or entity, whether voluntarily or involuntarily, by operation of law or otherwise. This representation and warranty shall survive execution and performance of this settlement.

4. All Parties further warrant and represent that the individual executing this settlement on behalf of each party has full authority to bind the party to the terms and conditions of the settlement. The governing bodies, boards of directors or officers of the Parties to this settlement have approved the terms set forth in this settlement, to the extent such approval is required by the rules, regulations, articles of incorporation, by-laws and any other governing documents of any party to the settlement.



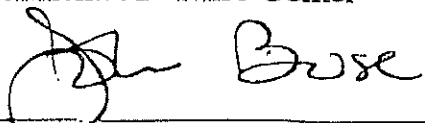
5. This settlement shall be construed and enforced in accordance with the laws of the State of California. The Kern County Superior Court shall be the appropriate venue for the resolution of any disputes arising from this settlement.

6. Except as provided in this settlement, the Parties shall bear their own attorneys' fees and costs in connection with the entire Newhall Ranch Litigation.

7. This settlement may be executed by facsimile signatures and in multiple counterparts, each of which shall be deemed to constitute an original, and all of which taken together shall constitute one in the same document. This settlement shall be effective on the Effective Date shown above.

March 30, 2004

Environmental Defense Center

By:   
John T. Buse

Chatten-Brown and Associates

March \_\_, 2004

By: \_\_\_\_\_  
Jan Chatten-Brown

Attorneys for Appellants, Sierra Club, Friends  
of the Santa Clara River and Santa Clarita  
Organization for Planning the Environment

Gatzke Dillon & Ballance LLP

March \_\_, 2004

By: \_\_\_\_\_  
Mark J. Dillon

Attorneys for Real Parties in Interest, The  
Newhall Land and Farming Company, *et al.*

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March \_\_, 2004

By: \_\_\_\_\_  
John T. Buse

Chatten-Brown and Associates

March 30, 2004

By:  \_\_\_\_\_  
Jan Chatten-Brown

Attorneys for Appellants, Sierra Club, Friends  
of the Santa Clara River and Santa Clarita  
Organization for Planning the Environment

Gatzke Dillon & Ballance LLP

March \_\_, 2004

By: \_\_\_\_\_  
Mark J. Dillon

Attorneys for Real Parties in Interest, The  
Newhall Land and Farming Company, *et al.*

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March \_\_, 2004

By: \_\_\_\_\_  
John T. Buse

Chatten-Brown and Associates

March \_\_, 2004

By: \_\_\_\_\_  
Jan Chatten-Brown

Attorneys for Appellants, Sierra Club, Friends  
of the Santa Clara River and Santa Clarita  
Organization for Planning the Environment

Gatzke Dillon & Ballance LLP

March 30, 2004

By:  \_\_\_\_\_  
Mark J. Dillon

Attorneys for Real Parties in Interest, The  
Newhall Land and Farming Company, *et al.*

## ORDER

THE COURT:

Pursuant to the above Notice of Settlement, the appeal in this action (5th Civil No. F044638) is dismissed, with prejudice, and without appeal costs to any party. Remittitur to issue forthwith.

\_\_\_\_\_, 2004

\_\_\_\_\_  
Associate Justice

ATTORNEYS:

Mark J. Dillon (State Bar No. 108329)  
Michael S. Haberkorn (State Bar No. 159266)  
Heather S. Riley (State Bar No. 214482)  
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Facsimile: (760) 431-9512

Civil No. F 044638  
(Superior Court No. 239324-RDR)

**DECLARATION OF SERVICE BY OVERNIGHT MAIL**  
**(C.C.P. Sections 1013a and 2015.5)**

I am a resident of the County of San Diego; I am over the age of 18 years and not a party to the within entitled action; my business address: 1921 Palomar Oaks Way, Suite 200, Carlsbad, California 92008.

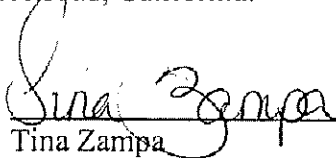
On March 30, 2004, I served the attached documents: **NOTICE OF SETTLEMENT AND DISMISSAL OF APPEAL** by placing a true copy thereof, enclosed in a sealed envelope, addressed as follows:

**SEE ATTACHED SERVICE LIST**

Service of the attached document was accomplished in the following manner: I placed such envelope(s) addressed as shown on the attached service list for collection and delivery by Golden State Overnight with delivery fees paid or provided for in accordance with this office's practice. I am readily familiar with this office's practice for processing correspondence for delivery the following day by Golden State Overnight.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on March 30, 2004, at Carlsbad, California.

  
Tina Zampa

**ATTACHMENT TO DECLARATION OF SERVICE BY OVERNIGHT MAIL**

**Civil No. F 44638**

**(Superior Court No. 239324 - RDR)**

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Ventura, CA 93003

Attorneys for Petitioners/Plaintiffs, Sierra Club, Friends of the Santa Clara River, and Santa Clarita Organization for Planning the Environment

**ATTACHMENT TO DECLARATION OF SERVICE BY OVERNIGHT MAIL**

**Civil No. F 44638**  
**(Superior Court No. 239324 - RDR)**

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Attorneys for Petitioners/Plaintiffs, Sierra Club, Friends of the Santa Clara River, and Santa Clarita Organization for Planning the Environment

The Honorable Roger D. Randall  
Department 6  
Kern County Superior Court  
1415 Truxtun Avenue  
Bakersfield, California 93301-5216

# FOX CANYON GROUNDWATER MANAGEMENT AGENCY

## BOARD OF DIRECTORS

Lynn E. Maulhardt, Chair  
Michael Conroy  
John K. Flynn  
Al Fox  
Roseann Mikos, Ph.D.

## AGENCY COORDINATOR

Lowell Preston, Ph.D.



December 24, 2001

Los Angeles County Board of Supervisors  
C/O Ms. Joanne Sturges, Executive Officer  
Room 383  
500 W. Temple Street  
Los Angeles, CA 90012

Subject: **Final Additional Analysis and Staff Report (Water Resources) for the Newhall Ranch Specific Plan FEIR DATED October 2001**

Dear Members, Board of Supervisors:

The subject report addresses the utilization of agricultural water, state project water and reclaimed water to support a demand of 17,680 acre feet for the subject project. Additional sources of ASR banking, water from Kern Water Bank and flood flows have also been identified as potential supplies. The Fox Canyon Groundwater Management Agency (FCGMA) has reviewed the Staff Report and the Final Additional Analysis for the Newhall Ranch Specific Plan and provides the following comments:

**Irrigation Water.** The applicant proposes to transfer the irrigation water previously used by Newhall Ranch to be used as a supply for the Newhall Ranch Development. We concur that the agricultural irrigation water used on parcels that will be taken out of service and become part of the Newhall Ranch Project represent an existing use and can therefore be shown as a source of water for the project. This only applies to the parcels that are within the boundary of this project. We agree that this is a valid supply and we agree that the existing use can be reasonably determined by applying the California Irrigation Management Information System (CIMIS) formula. However, we believe that additional accuracy is required. The FCGMA uses CIMIS as one means of managing the groundwater within its boundary. Due to this employment of CIMIS, the FCGMA has an indepth awareness of the detailed requirements necessary to determine the quantity of irrigation water used by various crop types. The following comments apply to the use of CIMIS:

1. The rainfall was not accounted for in the calculation of water use. Evapotranspiration (Et) values represent the water needed by a crop type. When there is rainfall the amount of rainfall that deep percolates supplies part of the total water required for that period. This part of the needed supply would not have been drawn from groundwater. The applicant made no provision to include rainfall. This inflates the water use.
2. The calculated irrigation water use included an additional arbitrary factor of 60% or 70% for soil type and irrigation method that is not part of the CIMIS formula. This factor inflates the water use.
3. Et is applicable to irrigated acreage. The calculated value did not explain how the acreage was determined. Experience from the FCGMA has shown that the acreage is typically overstated by 10 to 20% by simply using the parcel size and not deducting areas not irrigated.

800 South Victoria Avenue, Ventura, CA 93009-1600

(805) 654-2327 or 645-1372 FAX (805) 654-3350

Web sites: [www.foxcanyonma.org](http://www.foxcanyonma.org) or [www.ventura.org/vcpwa/fcgma](http://www.ventura.org/vcpwa/fcgma)

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4. There was no description of the irrigated agricultural properties. It is assumed that the irrigation water to be transferred to supply the demand for the project is currently being used on properties that are within the project boundary. Due to difficulties of monitoring and control, we do not concur with the use of irrigation water from any area not within the project boundary. 5

If the property currently receiving the irrigation water is within the project boundary, Table 1 shows a more accurate calculation of the irrigation water used. To construct Table 1., a crop factor of 1.0 was used since there is no detailed explanation of the crops actually grown. This favors the applicant. An effective rainfall of 25% of the approximately 16 inch annual average rainfall was applied.

Table 1.								
	Year	Crop	Acres	Et	Rain	Crop Factor	AF	Sub Totals
	2000	Alfalfa	55	62.21	4	1	266.7958	
		Sudan/pasture	150	62.21	4	1	727.625	
		Veg. Row crop	722	62.21	4	1	3502.302	4496.723
	1999	Alfalfa	55	63.08	4	1	270.7833	
		Sudan/pasture	150	63.08	4	1	738.5	
		Veg. Row crop	709	63.08	4	1	3490.643	4499.927
	1998	Alfalfa	115	56.39	4	1	502.0708	
		Sudan/pasture	100	56.39	4	1	436.5833	
		Veg. Row crop	663	56.39	4	1	2894.548	3833.202
	1997	Alfalfa	160	61.34	4	1	764.5333	
		Sudan/pasture	103	61.34	4	1	492.1683	
		Veg. Row crop	663	61.34	4	1	3168.035	4424.737
	1996	Alfalfa	105	61.28	4	1	501.2	
		Sudan/pasture	170	61.28	4	1	811.4667	
		Veg. Row crop	537	61.28	4	1	2563.28	3875.947
		Average						4226.107

The irrigated acreage was not changed nor was there an additional factor employed to account for soil type and irrigation method. It is believed that, even though the average annual use is considerably less, Table 1. shows a reasonable accommodation of the proposed methodology while still relating to CIMIS concept. 6

The agricultural water available for transfer to the new project is on the order of 4200 to 4300 acre feet per year. If the water is used, then recycled, approximately 50% to 80% of the water can be recovered depending upon the treatment selected. Using the maximum of 80% would result in a supply of 3440 acre feet available for irrigation. This would then make up a total supply of  $4300 + 3440 = 7740$  acre feet. Adding the 3691 acre feet of reclaimed water from CLWA would bring the total excluding imported water to  $7740 + 3691 = 11431$  acre feet. The balance of water needed can then be supplied by imported water 7

(New Imported Water 17680-11431 = 6249. Imported water would be any water obtained from a source not in hydrologic continuity with the Santa Clara River. e.g. water stored in the Kern Water Bank)

7

**Regarding the ASR project.** The ability of the Saugas Aquifer to function under storage and recovery operations has been shown by testing and is no longer a point of contention. However, the lack of calibration to transient conditions is still questioned.

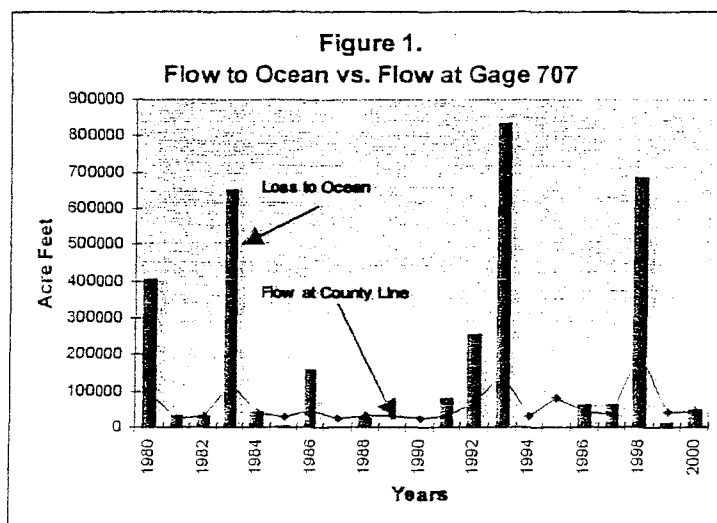
8

The applicant addressed the impacts to Ventura County by comparing the existing and future flows at the County line during wet periods and dry years. Constructing a model calibrated to steady state conditions facilitated a conclusion that the net water flowing into Ventura County would be increased. There are two problems with this procedure; 1) the steady state model selected, and 2) the analysis using a net flow criterion.

- 1) The problem with the model produced by the additional analysis is that a steady state solution was used to determine the effects of the injection/extraction. Since the pumping and recharge to the aquifer varies over time, the model used to portray the system must have the ability to incorporate the changing environment to which it is exposed. The effects to an aquifer result in different pressures in the aquifer. These pressures are called heads. Steady state solutions are useful to determine the relative difference in heads due to drawdown from pumping, but they do not produce the absolute value of the head. The absolute value of the head is the true pressure in the aquifer and the pressure that produces the gradient that is used to determine the potential for flow (in this case flow into Ventura County). Steady state conditions do not incorporate regional flow caused by regional head gradients and are not appropriate to represent systems that change over time. To determine the effects of time dependent influences, a transient model is required. The difference between a transient model and a steady state model is that a steady state model generates one set of heads and a transient model produces a set of heads for each time period.

9

The proponent's response to this problem contended that one steady state pressure head was compared to a new steady state pressure head thereby eliminating the necessity for transient calibration. This is inaccurate for two reasons; 1) the steady state model does not apply to a system constantly under going changes, and 2) because the question of concern is the absolute value of the pressure head, not the relative difference between two heads.



10

The analysis of the results of the model is also inaccurate because increasing the water crossing the County line at USGS Gauging Station Number 707 during a wet year does not contribute to recharge and

consequently has no value. This happens because river water is already being lost to the ocean. Figure 1. shows the water lost to the ocean in wet years as compared to river flow. It is easy to see that any time there is increased flow at the County Line there is an even greater loss to the ocean during that same period. This leads to discounting the potential benefit of additional water during wet years. 10

An adequate model of the river system is complicated and difficult. However, a solution that would be adequate consists of injecting 9000 acre feet before the first 4100 acre feet is extracted. Thereafter an injection of 4500 acre feet may be followed by an extraction of 4100 acre feet without damage to downstream flows. This solution adds an additional 4500 acre feet to the Saugas Aquifer that is never removed. 11

In summary, there are three problems:

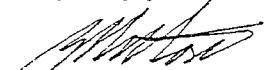
- 1) The calculation of the agricultural water used.
- 2) The type of model selected for analysis.
- 3) The wet year/dry year analysis.

All three of these issues can be resolved by:

- 1) Limiting the groundwater use to the 4300 acre feet that is available from the current agricultural irrigation water.
- 2) Increasing the imported water to 6249 acre feet. (State water or water stored in a location not hydrologically connected to the Santa Clara River)
- 3) Injecting 9000 acre feet during the first year of the ASR program and subsequently withdrawing 4100 acre feet as proposed. After the first year, 4500 acre feet could be added and 4100 acre feet extracted. 12

It is requested that this letter be made a part of the Administrative Record.

Very truly yours,



Lowell Preston, Ph.D.

cc: Lee Stark, Los Angeles County Planning Department, 320 Temple St., Los Angeles Ca 90012



**State of California  
California Regional Water Quality Control Board, Los Angeles Region**

**RESOLUTION NO. 2005-002  
January 27, 2005**

**Reiteration of Existing Authority to Regulate Hydromodifications within the Los Angeles Region, and Intent to Evaluate the Need for and Develop as Appropriate New Policy or Other Tools to Control Adverse Impacts from Hydromodification on the Water Quality and Beneficial Uses of Water Courses in the Los Angeles Region**

**WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:**

1. Protecting beneficial uses within the Los Angeles Region consistent with the Federal Clean Water Act and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) requires careful consideration of projects that result in hydrogeomorphic changes and related adverse impacts to the water quality and beneficial uses of waters of the State. The alteration *away from a natural state* of stream flows or the beds or banks of rivers, streams, or creeks, including ephemeral washes, which results in hydrogeomorphic changes, is generally referred to in this resolution as a hydromodification.
2. This resolution is intended to reiterate the existing authority the Regional Board relies upon to regulate hydromodifications within the Los Angeles Region. As such, it has no regulatory effect. This resolution represents a initial step in the process of first, heightening awareness about the potential impacts of hydromodification on water quality and beneficial uses and evaluating existing laws and regulations and the current methods employed by Regional Board staff when reviewing proposed hydromodification projects and, second, strengthening, if necessary, controls and policies governing hydromodifications that negatively affect water quality and beneficial uses. As a first step, it sets forth a process to achieve one of the Regional Board's highest priorities, which is to maintain and restore, wherever feasible, the physical and biological integrity of the Region's water courses. Secondly, maintaining the natural functions of water courses maximizes opportunities for stormwater conservation and groundwater recharge, which is very important in the semi-arid Los Angeles region where groundwater makes up half of the Region's water supply.
3. In addition to the process outlined in this resolution, the Regional Board has and will continue to strongly support restoration efforts in and along the Region's urbanized, highly modified water courses. The Regional Board also strongly supports preservation efforts geared toward ensuring long-term protection for the Region's remaining natural water courses.
4. Section 101(a) of the Clean Water Act, sets forth a national objective "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." (33 U.S.C. § 1251(a).) Chapter 1 of the Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) recognizes this national goal and specifies that the Basin Plan is designed to implement the Clean Water Act and its goals. As a result, a regional priority of maintaining and restoring, wherever feasible, the physical and biological integrity of the Region's water courses is firmly grounded in federal and state law.

5. To realize this objective, the Clean Water Act (33 U.S.C. § 1313(c)) and federal regulations (40 C.F.R. § 131.10(a)) direct States to specify appropriate designated uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial and other purposes including navigation. The standards must explicitly be designed to “protect the public health or welfare and enhance the quality of the water.” (33 U.S.C. § 1313(c).)
6. The Basin Plan designates the beneficial uses of the Region’s water bodies consistent with the California Water Code, federal Clean Water Act, federal regulations, and with the national “fishable/swimmable” goal of the CWA forming the broad basis for the beneficial use designations of surface waters throughout the Region. Some of the beneficial uses most benefited by preserving water courses in a natural state include aquatic life [WARM and COLD among others], wetland habitat, and groundwater recharge. In addition, the Basin Plan establishes water quality objectives for the protection of these beneficial uses. An important provision of the Basin Plan, which is required by federal law (40 C.F.R. § 131.12) and state law (SWRCB Resolution No. 68-16), is an anti-degradation policy designed to maintain existing, high quality waters. The beneficial uses of water bodies, water quality objectives and anti-degradation policies, together, constitute a State’s water quality standards.
7. The Regional Board primarily relies upon a three-pronged approach to regulating hydromodifications. The first two are (1) waste discharge requirements issued pursuant to Water Code section 13263 and waivers issued pursuant to Water Code section 13269 to protect waters of the State and (2) certifications issued in accordance with Clean Water Act section 401 to protect waters of the U.S. These two approaches are not mutually exclusive. (Cal. Code Regs., tit. 23, § 3857.) The third prong consists of municipal stormwater permits issued pursuant to section 402 (p) of the Clean Water Act to address stormwater related problems including stormwater quality and increased flows.
8. “Waters of the State” include all waters of the U.S. In addition, waters of the State include waters that are not “navigable waters” under the federal Clean Water Act, including certain intermittent and ephemeral streams, wetlands, lakes, reservoirs, and other isolated non-navigable waters.
9. Human civilization has attempted to alter the environment through hydromodifications for centuries. In the Los Angeles Region, beginning in the early part of the 20<sup>th</sup> century, hydromodifications were constructed by public agencies to protect residents from floods and to collect and conserve stormwater for drinking water purposes and recreation. In addition, extensive urban development, and the corresponding increase in impervious area within the watershed and decrease in the width of natural floodplains, has often resulted in significantly altered patterns of surface runoff and infiltration and, consequently, stream flow. This, in turn, has necessitated further in-stream hydromodification in order to stabilize banks and constrain the stream to the channel to prevent flooding. The sequence of events is discussed extensively in the Basin Plan and in the Regional Board’s municipal storm water permit for Los Angeles County. (Regional Board Order No. 01-182.)
10. Many hydromodifications were undertaken with laudable goals often for public safety and welfare, but have later been shown to de-stabilize and enlarge stream channels as well as degrade habitat and reduce species abundance and diversity. As a result, when reviewing

hydromodification projects it is important to carefully consider whether the immediate improvements sought are designed in such a way as to avoid unintended adverse consequence on the character of the receiving water and its beneficial uses in the vicinity, and downstream of the hydromodification.

11. Activities that alter natural *stream flows* may include increasing the amount of impervious land area within the watershed, altering patterns of surface runoff and infiltration, and channelizing natural water courses. Activities that alter the natural *stream channel* include but are not limited to human-induced straightening, narrowing or widening, deepening, lining, piping/under-grounding, filling or relocating (i.e. channelization); bank stabilization; in-stream activities (e.g. construction, mining, dredging); dams, levees, spillways, drop structures, weirs, and impoundments.
12. Hydromodifications may impair beneficial uses such as warm and cold water habitat, spawning habitat, wetland habitat, and wildlife habitat in a variety of ways. Modifications to stream flow and the stream channel may alter aquatic and riparian habitat and affect the tendency of aquatic and riparian organisms to inhabit the stream channel and riparian zone. As a result of these hydromodifications, the biological community (aquatic life beneficial uses) may be significantly altered, compared to the type of community that would inhabit an unaltered, natural stream.
13. For example, channelization usually involves the straightening of channels and hardening of banks and/or channel bottom with concrete or riprap. These modifications may impair beneficial uses by disturbing vegetative cover, removing habitat; modifying or eliminating instream and riparian habitat; degrading or eliminating benthic communities; increasing scour and erosion as a result of increased velocities, and increasing water temperature when riparian vegetation is removed. The regular maintenance of modified channels may impair beneficial uses by disturbing instream and riparian habitats if not managed properly. These modifications may also, if not managed properly, impair beneficial uses by depriving wetlands and estuarine shorelines of enriching sediments or by excessive deposition in downstream environments; changing the ability of natural systems to both absorb hydraulic energy and filter pollutants from surface waters; and altering habitat for spawning and other critical life stages of aquatic organisms. Hardening of channels may also eliminate opportunities for groundwater recharge in some areas. Furthermore, some hydromodifications may reduce recreational opportunities and may reduce the aesthetic enjoyment of people engaged in recreation in and around the water body.
14. As a result of past hydromodifications, there are few natural stream systems remaining in the region. Water bodies that have not undergone extensive hydromodification such as portions of the Santa Clara River, upper San Gabriel and Los Angeles Rivers, Malibu Creek, Topanga Canyon, coastal streams in the Santa Monica Mountains, and tributaries to these larger rivers provide immeasurable benefits to the Region. These benefits include high quality warm and cold-water aquatic habitat, spawning habitat, migratory pathways, wildlife corridors, wildlife and riparian habitat, wetland habitat, recreational and aesthetic enjoyment, and groundwater recharge. Yet, many of these water bodies and their tributaries continue to be threatened by expanding urban development.
15. The Regional Board acknowledges that there is a wide array of hydromodification projects. Some result in positive environmental impacts such as stream restoration projects. Others result in negligible or temporary adverse environmental impacts if managed properly. These may include widening bridges and installing flow measuring devices, such as weirs, or energy

dissipating devices where a constructed channel meets a natural channel. On the other end of the continuum are large hydromodification projects or multiple projects with cumulative impacts that permanently alter the hydrologic and ecological functions of a stream and, thus, adversely affect the beneficial uses described above. These include, but are not limited to, projects that bury natural stream channels, channelize natural water courses, or involve instream activities such as mining or construction. Regional Board staff evaluates the severity of adverse environmental impacts on a project-by-project basis.

16. The Regional Board recognizes that maintenance activities are required in modified channels in order to ensure continued flood protection and vector control. The Regional Board has authorized such activities through the issuance of Section 401 certifications in the past and would expect to continue to authorize such activities. The Regional Board also recognizes that maintenance activities may need to be carried out on an emergency basis due to various exigencies, including brush fires and flooding. The Board through the issuance of Section 401 certifications has also authorized these emergency maintenance activities. Nothing in this resolution is intended to alter the ability of these local agencies to continue ongoing maintenance activities.
17. The Regional Board also recognizes the value of the spreading grounds that have been constructed along many of the Region's larger water courses. These spreading grounds serve a valuable function by recharging storm water into the Region's groundwater to bolster local water supplies. Nothing in this resolution is intended to alter the ability of local and regional agencies to conserve stormwater within existing regulations with the goal of increasing local water supplies.
18. The Regional Board and local agencies have undertaken or sponsored hydromodification field assessments and studies to develop peak flow design criteria to minimize or eliminate adverse impacts from urbanization for water courses in the counties of Ventura and Los Angeles. These studies include the 'Urbanization and Channel Stability Assessment in the Arroyo Simi Watershed of Ventura County, CA' (2004), and the 'Peak Impact Discharge Study' sponsored by the County of Los Angeles, which is in progress. The results from these studies will be used to develop objective criteria to reduce or eliminate the adverse impacts of hydromodification in the Los Angeles Region from new development and redevelopment.
19. Though the Regional Board does not have authority to regulate land use, the Regional Board strongly encourages land use planning agencies and developers to carefully consider, early in the development planning process, the potential impacts on water quality and beneficial uses of hydromodification projects proposed as part of new development. The Regional Board strongly discourages direct hydromodification of water courses except in limited circumstances where avoidance or other natural alternatives are not feasible. In these limited circumstances, project proponents must clearly demonstrate that a range of alternatives, including avoidance of impacts, has been thoroughly considered, hydromodification has been minimized to the extent practicable, and adequate in situ and/or off site mitigation measures have been incorporated to offset related impacts. Project proponents must also document that there will be no adverse effects to water quality or beneficial uses. This approach is consistent with the California Environmental Quality Act (CEQA), federal regulations and State and federal antidegradation policies.
20. Chapter 4 of the Basin Plan, "Strategic Planning and Implementation", outlines the suite of regulatory tools available to the Regional Board to maintain and enhance water quality. One of these tools is the 401 Certification Program. This federally required program regulates



most hydromodification projects to ensure that the projects will not violate State water quality standards of which beneficial uses are an essential component. Section 401 Certifications may include conditions to minimize impacts from hydromodification activities by implementing Best Management Practices such as working in the dry season or out of the water, among many others. Certifications may also include monitoring requirements in order to ensure that the project is completed as specified and any proposed mitigation is successful.

21. Under section 401 of the Clean Water Act, the State Water Resources Control Board and the Regional Boards have a time limit as prescribed by applicable laws and regulations, from the receipt of a complete application, to certify that a project will comply with applicable state water quality standards prior to issuance of a federal 404 dredge and fill permit for any activity that may result in a discharge to a surface water of the United States. In the event that a project will not comply with applicable water quality standards, even with all conditions proposed, then the certification may be denied. (Cal. Code Regs., tit. 23, § 3837, subd. (b).)
22. Under section 402 (p) of the federal Clean Water Act, the State Water Resources Control Board and the Regional Boards are required to issue storm water permits to owners and operators of municipal separate storm sewer systems (MS4s). On a permit-by-permit basis, MS4 permits may identify storm water-related problems and include provisions requiring municipalities to implement measures to reduce adverse impacts of hydromodification, primarily increased flows, on beneficial uses.
23. Under separate authority granted by State law (see Article 4 (commencing with section 13260) of Chapter 4 of the Porter-Cologne Act), a Regional Board may regulate discharges of dredge or fill materials as necessary to protect water quality and the beneficial uses of waters of the State by issuing or waiving waste discharge requirements, a type of State discharge permit. For projects that may result in a discharge to a surface water of the U.S., waste discharge requirements may be issued in addition to the 401 certification. (Cal. Code Regs., tit. 23, § 3857.) Issuance of waste discharge requirements may be the only option for the Regional Board in situations where the proposed discharge is to waters of the state (e.g. isolated waters, vernal pools, etc.) rather than waters of the U.S., or in situations where the federal agency does not claim jurisdiction. All discharges of waste, including dredged and fill material, to waters of the State are privileges and not rights.
24. With certain exceptions, the California Environmental Quality Act (CEQA) requires the preparation of environmental documents for all projects requiring certifications by the state or state-law-only waste discharge requirements from the Regional Board. Hydromodification activities discussed above that require certification under section 401 of the Clean Water Act or that require waste discharge requirements for dredging and filling of State waters may be subject to CEQA. For projects that may have a significant effect on the environment that cannot be mitigated, an environmental impact report must be prepared that requires consideration of feasible alternatives to the project. (Pub. Resources Code, § 21061.)

**THEREFORE, be it resolved that**

1. Maintaining and restoring, where feasible, the physical, chemical and biological integrity of the Region's watercourses is one of the Regional Board's highest priorities.

This resolution reiterates existing law and regulatory requirements and current staff practices. As such, it has no regulatory effect. However, the Regional Board directs staff to undertake a two-step process to evaluate and consider further action to control adverse impacts from hydromodification. During this process, staff is directed to involve stakeholders and regulatory agencies with jurisdiction, consistent with the requirements of the Porter-Cologne Water Quality Control Act. The first step shall be an evaluation process and shall address, at a minimum, the following:

- Prioritization for control of those hydromodification activities that cause the greatest adverse effects on water quality and beneficial uses;
- Evaluation of existing regulation of hydromodification as defined herein;
- Consideration, in light of the existing regulatory scheme, of issues affecting the Board's ability to achieve its identified objectives;
- Consideration of existing legal authorities for Board actions;
- Consideration of staff resources; and
- Evaluation and identification of the best regulatory means available to the Board and the other agencies with jurisdiction to fulfill Board objectives.

The second step shall involve, as necessary based on the above evaluation, proposals for Board consideration of actions, including without limitation educational campaigns, memoranda of understanding with other regulatory agencies, adoption of new guidance, additional municipal stormwater permit requirements or further Basin Plan amendments as necessary to address gaps in existing hydromodification control in order to maximize the Regional Board's authority to ensure that a hydromodification project does not adversely affect water quality or degrade beneficial uses of those waters.

2. Given the priority set forth in paragraph 1, the Regional Board reaffirms that the Executive Officer will only issue a certification pursuant to Clean Water Act section 401 with adequate documentation (i) that the project will comply with applicable water quality standards, including antidegradation policies, and (ii) if necessary, that adequate analysis of a range of alternatives has been performed consistent with federal regulations, the California Environmental Quality Act, and antidegradation requirements.
3. Furthermore, given the significant potential adverse impact of large-scale or multiple hydromodification projects, the Regional Board reaffirms that the Executive Officer may at his discretion choose to bring a proposed project before the Board for direction prior to certification or recommend waste discharge requirements for the proposed project, which would be subject to Board approval.
4. Given the priority set forth in paragraph 1, the Regional Board reaffirms that it will only issue waste discharge requirements with adequate documentation (i) that the WDR will implement any relevant water quality control plan, including the water quality standards contained therein, and (ii) that adequate analysis of a range of alternatives, where an alternatives analysis is required, has been performed consistent with the Porter-Cologne Water Quality Control Act, CEQA and antidegradation requirements.
5. Following completion of the two-step evaluation process described in 2 above, the Regional Board directs staff to develop, if necessary based on the conclusions of the evaluation, new policy or additional regulatory or non-regulatory tools to control adverse impacts from hydromodification, which may include educational campaigns, memoranda of understanding,

guidelines, additional municipal stormwater permit requirements and amendments to the Basin Plan.

Regulatory tools may incorporate specific criteria and evaluation requirements to be used by Regional Board staff when evaluating projects for water quality certification or waste discharge requirements, and setting conditions for certification or for Standard Urban Stormwater Mitigation Plan (SUSMP) or Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) approval by the local agency. If a Basin Plan amendment is necessary, the Regional Board further directs staff to bring said amendment to the Board for its consideration in the near future. Any proposed criteria and evaluation requirements should ensure that developers avoid, minimize or, as a last course, compensate for both the on-site and downstream adverse impacts of development on the water quality and beneficial uses of watercourses.

6. When evaluating the issue of hydromodification and identifying specific actions to be taken if necessary, the Regional Board shall consider at a minimum the following:
  - Existing federal and state law and regulation; state and regional policies; and current methods employed by Regional Board staff related to hydromodification of water courses.
  - Consistency and coordination with other agencies' authorities over hydromodifications.
  - Existing staff resources available to implement current Regional Board programs and regulations related to hydromodification of water courses.
  - The local and regional value of maintaining water courses in their natural state.
  - Federal guidelines including, but not limited to, section 404(b)(1), which constitutes the substantive federal environmental criteria that are used in evaluating applications for certain discharges of dredge or fill material;
  - Statewide General Waste Discharge Requirement for certain dredge and fill activities not requiring a Section 404 Permit or a Section 401 Certification under the federal Clean Water Act (State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ);
  - State Water Resources Control Board, "Regulatory Steps Needed to Protect and Conserve Wetlands not subject to the Clean Water Act," Report to the Legislature, Supplemental Report of the 2002 Budget Act, April 2003.
  - The State Water Resources Control Board Workplan: Filling the Gaps in Wetlands Protection (Sept. 24, 2004);
  - State Water Resources Control Board Guidance for Regulation of Discharges to "Isolated" Waters (June 25, 2004);
  - National Research Council, "Riparian Areas: Functions and Strategies for Management, Committee on Riparian Zone Functioning and Strategies for Management," National Academy Press, Washington, D.C., 2002.
  - State guidance including, but not limited to, "A Primer on Stream and River Protection for the Regulator and Program Manager" (by Ann L. Riley) and the "California Rapid Assessment Method for Wetlands" for evaluating mitigation sites;
  - "Stream Corridor Restoration: Principles, Processes, and Practices." Prepared by the Federal Interagency Stream Restoration Working Group (FISRWG) (10/1998);
  - General principles of low impact development (various sources);
  - The findings of the study commissioned by the Los Angeles County Department of Public Works through the Storm Water Monitoring Coalition in order to satisfy a requirement of the Los Angeles County Municipal Storm Water Permit (Regional Board Order No. 01-182), which calls for a study to evaluate peak flow control and determine numeric criteria to prevent or minimize erosion of natural stream channels and banks caused by urbanization, and to protect stream habitat;

- The findings of the study “Urbanization and Channel Stability Assessment in the Arroyo Simi Watershed of Ventura County, CA – Final Report” (2004) completed by the Ventura County Watershed Protection District, in order to satisfy a requirement of the Ventura County Municipal Storm Water Permit (Regional Board Order No. 00-108), which calls for the development of criteria to prevent or minimize erosion of natural channels and banks caused by urbanization and protect stream habitat; and
  - Additional data collected or initiated by municipalities, dischargers and developers on stream stability for study sites in Los Angeles and Ventura Counties to reduce statistical uncertainty and/or improve model predictability when establishing stream stability protective criteria.
7. If a Basin Plan amendment is deemed necessary, staff is directed to consult with affected state and local agencies prior to formulating the draft amendment(s).
  8. During the evaluation process, staff is directed to seek input from:
    - the Department of Fish and Game and the U.S. Army Corps of Engineers, the United States Fish and Wildlife Service and other agencies with jurisdiction over hydromodification projects to ensure that any future policies and requirements to be proposed do not conflict with the jurisdiction and regulatory authority of these agencies; and
    - stakeholders, including flood control agencies, agricultural interests, the building and construction industry, and environmental groups.
  9. Pursuant to section 13224 and 13225 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the Resolution.

I, Jonathan Bishop, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on January 27, 2005.

*ORIGINAL SIGNED BY*

*2/23/05*

\_\_\_\_\_  
Jonathan S. Bishop, P.E.  
Executive Officer

\_\_\_\_\_  
Date